S E C T I O N I I I

WASTE ANALYSIS PLAN

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

3.0 WASTE ANALYSIS PLAN

3.1 Introduction

The purpose of this Waste Analysis Plan is to document the necessary sampling methodologies, analytical techniques, and overall procedures that are undertaken for all hazardous wastes (hereinafter "waste") that enter the Veolia ES Technical Solutions, L.L.C. – Menomonee Falls, WI (Veolia – Menomonee Falls) for storage and treatment pursuant to s. NR 664.0013, Wisconsin Administrative Code (WAC). Specifically, the plan delineates the following:

- Sampling Methodology to ensure that adequate and representative samples are collected.

- Analytical Techniques to determine or identify waste information so that appropriate treatment and storage techniques can be utilized.

- Pre-Acceptance Procedures to determine the acceptability of a particular waste stream pursuant to facility permit conditions and operating capabilities prior to any shipment of that waste to the facility.

- Incoming Load Procedures to determine whether the delivered waste matches the accompanying manifest, pre-acceptance documentation, and the conditions of the facility permit.

- Process Operations Procedures to maintain safe and appropriate methods of storage, treatment or movement of wastes within the facility.

- Quality Control Policy the facility laboratory follows to achieve high quality analytical results.

It is the policy of Veolia – Menomonee Falls that all wastes handled by the facility will be subjected to these procedures. This is to help ensure that the facility will be in compliance with applicable permits and regulations. For the purpose of sampling and analysis, Veolia – Menomonee Falls means the Veolia – Menomonee Falls laboratory, any Veolia ES Technical Solutions, L.L.C. laboratory, any Veolia Environmental Services laboratory, or Veolia Environmental Services designated contract laboratory.

The forms shown within this Waste Analysis Plan are typical forms currently utilized by this facility. Equivalent or alternate forms may be used. These forms may be updated, based upon changes in regulations, operations or other needs.

The Laboratory, Technical and General Manager or their designees, hereinafter, are collectively or individually referred to as the Laboratory, Technical or General Manager, or "Site Management".

Veolia – Menomonee Falls strives to maintain, at all times, complete compliance with the hazardous waste regulations. Because new testing requirements, such as those promulgated under the Land Disposal Restrictions, often become effective prior to the time Waste Analysis Plan revisions can be formally made and approved by the appropriate agencies, it is impossible to have in place an approved Waste Analysis Plan meeting all the conditions of the immediately effective requirements.

In light of these facts, the facility will have in place a written protocol specifying the new requirements prior to receipt and/or processing of the regulated waste. The facility may also periodically revise the protocol to reflect scientific advances or additional requirements. If Waste Analysis Plan revisions are necessary, they will be submitted within 60 days after the effective date of the rule.

3.2 Sampling Methodology

Sampling is performed at Veolia – Menomonee Falls to confirm waste shipments. The waste generator performs the sampling at his facility to make his initial waste

determination. Specific sampling procedures are dependent on both the nature of the material and the type of contaminant. This section presents sampling methodologies to be utilized on-site by Veolia – Menomonee Falls personnel. Waste generators are referred to 40 CFR 261, Appendix I and ch. NR 661, Appendix I, WAC for sampling procedures. When a waste shipment arrives at the facility for storage and/or processing, a determination has previously been made by the generator that the waste is either:

1) A listed hazardous waste as defined in Subpart D of 40 CFR 261 and s. NR 661.11, WAC;
2) A characteristic waste as defined in Subpart C of 40 CFR 261 and s. NR 661.12, WAC; or
3) A waste material that is not a hazardous waste as defined in 40 CFR 261.4(b) and s. NR 661.04(2), WAC.

The generator-supplied characterization provides Veolia – Menomonee Falls with information concerning both the distribution and the nature of the waste components. (See section 3.4.1 for a discussion regarding the information and/or data to be supplied by the generator). Therefore, as described in USEPA document SW-846, a sampling approach that is less comprehensive than that used by the generator to make his initial waste determination is appropriate (e.g., vertical compositing will yield a representative sample). The purpose of the sampling and analysis at this point is to ensure that the shipped waste matches the overall identity of the waste designated on the accompanying manifest (or shipping paper) and the pre-acceptance paperwork. The analysis will also help ensure that the appropriate storage or processing techniques are utilized.

3.2.1 Materials

The methodologies utilized for specific materials correspond, at a minimum, to those referenced in 40 CFR 261, Appendix I and ch. NR 661, Appendix I, WAC. The sampling methods and the equipment utilized for different materials are presented in Table 3-1 in Appendix D. Drawings and descriptions of the listed sampling devices are provided in Appendix D.

Because ignitable wastes will be processed onsite, several procedures will be employed to protect against ignition of these wastes. No smoking, welding, or other ignition-causing activities will be permitted in or near the waste. Grounding and bonding procedures will be followed to prevent the build-up and/or discharge of a static charge when transferring of ignitable liquids occurs.

3.2.2 Types of Containment

In addition to EPA-approved sampling procedures, Veolia – Menomonee Falls has instituted specific methodologies for ensuring that samples taken from various types of containments are representative. The type of containment may be (1) transportable, such as drums and portable transport units (e.g., tanker trucks, roll-off boxes, etc.), or (2) stationary, such as tanks and in-process sources (e.g., pug mill, feed hopper, etc.). The sampling devices are selected depending on the size and type of the containment and on the specific material involved.

Access to containment (e.g., barrel bungs, truck dome, etc.) will influence the location within the container from which samples can be taken. Vertical compositing will yield a representative sample. A single vertical axis sample of flowable material will be taken where possible (i.e., drums and tanks where depth does not prevent the use of a Coliwasa or an open tube sampler).

Where a single vertical axis is not possible (i.e., large tanks), a weighted bottle (or equivalent device such as a sampling bomb) will be used to take samples at various depths. In addition, where tanks do not permit sampling from the top of the tank or where the tank is agitated, sampling may be accomplished through ports or taps located in a vertical plane along the side of the tank or through pumps or fittings at the tank's inlet or outlet. These samples may be composited in equal volume to yield a representative sample. If examination indicates that the waste is stratified, each layer may be analyzed.

Sampling of small containers (e.g., drums, cartons, etc.) varies with the nature of the waste material. For flowable materials, the sampling device of choice is either a Coliwasa unit or an open tube sampler to draw a full vertical section. For non-flowable wastes, an open tube sampler or a trier (or other appropriate equipment as listed in Table 3-1, Appendix D) is used to obtain a representative sample.

Bulk containments for solid or flowable materials may be either stationary or mobile. Liquids are sampled with a Coliwasa or an open tube sampler to obtain a vertical section, or by weighted bottle or bomb sampler to allow for sampling at various depths. Light, dry powders and granules are sampled with an open tube sampler (or other appropriate equipment as listed in Table 3-1, Appendix D). Heavier solids are sampled by trier, shovel, or by coring with heavy tubing (or other appropriate equipment as listed in Table 3-1, Appendix D). Tank sediments may be sampled from the bottom sampling valve when not readily sampled from above.

3.2.3 Process In-Line Sampling

The variability of the waste stream at any point in a treatment process is first determined from knowledge of the process producing the stream, or from the results of a preliminary investigation of the waste stream. Sampling frequency is based upon the nature of the process and waste characteristics. The samples can vary in size, depending on the flow rate of the stream.

3.3 Analytical Rationale

A pre-existing waste characterization is supplied to Veolia - Menomonee Falls by the generator on a certified Waste Profile Sheet (WPS), or equivalent form. The generator is required to provide all the information required by 40 CFR 264.13(a)(1) and (2) and s. NR 664.13(1)(a) and (b), WAC (see Section 3.4.1 for a discussion regarding the information and/or data to be supplied by the generator). The analyses provided by Veolia – Menomonee Falls ensures that the waste material matches the overall identity of the waste designated on the accompanying manifest (or shipping paper) and the pre-acceptance paperwork. The analysis also will help to ensure

that the appropriate storage and/or processing techniques are used. Veolia – Menomonee Falls will use State of Wisconsin certified and/or registered laboratories for analysis.

Analytical methods are classified as "Mandatory Analyses" or "Supplemental Analyses". At a minimum, all pre-acceptance waste samples are subjected to the "Mandatory Analyses" as a first step in the analytical scheme except as noted in section 3.4.1.1. "Supplemental Analyses" are performed according to need and at the direction of site management. Site Management may select additional analyses to augment the mandatory screening or to provide additional operational control. This provides a tiered approach to waste identification, enabling Veolia – Menomonee Falls to structure the analyses to adequately identify the waste during the pre-acceptance and incoming load phases of operation.

A summary of the analytical parameters within each category and their usage is provided herein and in Appendix D. Analyses are not necessarily repeated for sequential activities or movement of the same waste within the facility unless required by changes in the waste's identity, as determined by site management.

3.3.1 "Mandatory Analyses"

The "Mandatory Analyses" include screening procedures that are performed to provide a general identification of the waste, and are used to indicate the type of storage and/or processing that is most suitable for that particular waste. These analyses, which are accepted standard techniques, are performed on all wastes, except as noted in Sections 3.4.1.1 and 3.4.1.2. The parameters and associated rationale of the "Mandatory Analyses" are as follows:

1. Physical Description is used to determine the general physical characteristics of the waste. This facilitates subjective comparison of the sampled waste with prior waste descriptions or samples. It is also used to identify the presence or absence of observable free liquid.

2. pH is performed to indicate pH and, in general, the corrosive nature of the waste. pH may not apply to certain wastes, e.g., organic solvent waste, oil waste, or solid waste that is not water-soluble.

3. Water Mix water and waste are mixed in an approximate 10:1 ratio to test for reactivity. A thermometer may be used to measure heat generation. Qualitative solubility and relative apparent density are observed concurrently.

4. Flammability Potential Screen is used to indicate the fire-producing potential of the waste. This test can be applied to all waste liquids, semi-solids and solids.

5. Sulfides Screen is used to indicate whether the waste produces hydrogen sulfide upon acidification below pH 2.0. It is not required if the pH of the waste is less than 2.0, if the waste is not water-soluble, or if the waste is not aqueous.

6. Cyanide Screen indicates whether the waste produces hydrogen cyanide gas on acidification below pH 2.0. It is not required if the pH of the waste is less than 2.0 or the waste is not aqueous.

3.3.2 "Supplemental Analyses"

"Supplemental Analyses" are performed to further identify wastes as appropriate. "Supplemental Analyses" are conducted when the "Mandatory Analyses" indicate that further information is needed to confirm the waste or to properly store and/or process the waste. The analyses are performed as directed by site management. The results of these analyses provide site management with another level of confidence concerning the proper means of storage and/or processing. Others are unique procedures and protocol formulated by Veolia ES Technical Solutions, L.L.C., in the absence of standard procedures. Some of these additional analyses

utilize standard analytical techniques recognized by the USEPA and ASTM. "Supplemental Analyses" are not performed for containerized wastes temporarily stored at Veolia – Menomonee Falls (i.e., on incoming direct throughput loads).

3.3.2.1 Unique "Supplemental Analyses"

The applicability of these analyses, as described below, is based on procedures and protocol formulated by Veolia ES Technical Solutions, L.L.C.:

- Stabilization Evaluation is run to determine whether the waste is amenable to stabilization, and to determine the ratio of stabilization agent-to-waste required to effect stabilization.

- Dissolved Sulfides are analyzed to provide quantitative backup to the reactive sulfides screen.

- Mix:Ratio Evaluation is used to determine the appropriate ratio of waste-to-reagent for optimum treatment.

- Solvent Screen determines whether a waste contains land disposal restricted organic constituents.

- Cyanide - Conversion Amenable are tested to determine the effectiveness of other types of reagents for cyanide treatment.

- Quick Leach Extraction Procedure is used as a rapid extraction procedure to qualitatively duplicate metals leachability.

- Phenol Screen determines whether a waste contains phenolics.

- Radioactivity Screen is performed to ensure that no radioactive material above background levels is present in the waste.

3.3.2.2 Analyses Using Standard Techniques

The applicability of the following supplemental analytical procedures is based on ASTM and "Standard Methods" approved by EPA:

- PCBs are run to indicate whether PCBs are present in oil bearing liquid wastes, and to ascertain their concentration.

- Gas Chromatography Scan is used to separate and identify organic compounds.

- Specific Gravity indicates the density of the waste (e.g., to determine suitability for solvent recovery).

- Oxidizer Screen will determine the presence of oxidizers.

- Percent Acidity determines the acidity in the waste by species.

- Percent Alkalinity determines the amount of alkalinity in the waste by species.

- Liquid Waste Compatibility Test (LWCT) is used to determine whether liquid wastes that are to be stored or processed together are compatible. This is a required test for all bulk liquid shipments, unless the Laboratory or Technical Manager waives the test because wastes already present in a tank are

from the same source and are compatible or a receiving tank is empty and free of any incompatible materials.

- pH provides a more precise measurement of pH and an indication of corrosivity when determining process parameters.

- Free Cyanide measures the cyanide that would be potentially reactive under acid conditions.

- Total Cyanide (Distillation with MgCl,) quantifies the concentration of free and complexed cyanide.

- Total Sulfides is used to quantify the concentration of total sulfide.

- Specific Organic Compounds indicates the concentration of specific organics.

- Flash Point further characterizes ignitable wastes to establish proper storage mode and conformance with permit conditions. A closed cup is used for liquids, and an open cup may be used for solids.

- Phenols quantifies the concentrations of phenols.

- Priority Pollutant Scan checks for the presence of EPA priority pollutants, (e.g., volatile organics, acid extracts, and base/neutral extracts).

- Paint Filter Test is used to indicate if free liquids are present in a solid or semi-solid material.

- Heavy Metals (As, Ba, Cd, Cr. Ph. Hg. Se, Ag) are run to quantify heavy metals concentration to determine process operating parameters.

- Miscellaneous determines potential salt precipitation and is used for monitoring certain processes.

- Total Residue quantifies the suspended and dissolved solids present and moisture content for selected processes.

- Halogen Content (including CO determines the potential for acid gas generation during combustion.

- Water Content is used to determine the amount of free water.

- Heat Value assesses the amount of heat available for release during thermal combustion (incineration or use as fuel supplement).

- Percent Ash is used to estimate particulate generation and inorganic solid residue for incineration system control.

- Toxicity Characteristics Leaching Procedure (TCLP) is used to determine whether a waste or a treated waste residue contains levels of restricted constituents above the appropriate treatment standards and/or RCRA characteristic compounds above the specified regulatory thresholds.

- Extraction Procedure Toxicity determines whether a waste any of the characteristic constituents above the specified regulatory thresholds.

Other standard analytical techniques not listed here may be added as required by changes in regulations, company policy, etc. These techniques will be taken from recognized sources (i.e., AOAC, ASTM, EPA, etc.).

3.4 Pre-Acceptance Procedures

Veolia – Menomonee Falls has developed a series of control procedures to determine the acceptability of specific wastes for receipt at the facility. These pre-acceptance control procedures dictate what information a potential customer must provide to enable Veolia – Menomonee Falls to determine the acceptability of the waste for storage and/or processing. At a minimum, the generator will supply Veolia – Menomonee Falls with all of the information required by 40 CFR 264.13(a)(1) and (2) and s. NR 664.13(1)(a) and (b), WAC (see Section 3.4.1 for a discussion regarding the information and/or data to be supplied by the generator).

Pre-acceptance control is the mechanism for deciding to reject or accept a particular type of waste -- prior to its shipment to the facility -- based on the conditions or limitations of existing permits, its compatibility with other wastes being stored or processed at the Veolia – Menomonee Falls facility, and its policies governing waste acceptance.

3.4.1 Procedural Requirements

For each new waste stream that is a candidate for delivery to the facility, except as noted in Section 3.4.1.1 and 3.4.1.2, the following procedures are implemented. The generator will provide Veolia – Menomonee Falls with:

(1) Pertinent chemical and physical data provided on the Waste Profile Sheet (WPS), shown as Figure 4-1, Appendix D
(2) A representative sample, if required;
(3) Land Disposal Restriction (LDR) Notification/Certification Information and/or data.

A. If the waste is subject to a Land Disposal Restriction (40 CFR Part 268 and ch. NR 668, WAC) and the generator wants the waste

to be treated by Veolia ES Technical Solutions, L.L.C.:

- the generator will supply the appropriate LDR notification information and, if necessary, any applicable data.

- If necessary, Veolia – Menomonee Falls will perform the necessary treatment and develop the data necessary to demonstrate that the appropriate treatment standard(s) can be met. The analytical testing to be performed by Veolia – Menomonee Falls as part of treatment is described in Section 3.6.2 of this Waste Analysis Plan.

B. If the waste is subject to a Land Disposal Restriction and the generator (or a treater) has treated the waste:

- the generator (or the treater) will supply the appropriate LDR Certification information and the analytical data. This data demonstrates compliance with the Land Disposal Restrictions of 40 CFR Part 268 and ch. NR 668, WAC.

C. If the waste is subject to a Land Disposal Restriction and the generator has determined that the waste naturally meets the treatment standards:

- the generator will supply the appropriate LDR certification information and the analytical data necessary to demonstrate compliance with the Land Disposal Restrictions of 40 CFR Part 268 and ch. NR 668, WAC. If the generator has developed this certification based upon knowledge of the waste and does not supply analytical data, then Veolia – Menomonee Falls will develop the analytical data necessary to demonstrate compliance with the appropriate Land Disposal Restrictions (40 CFR Part 268 and ch. NR 668, WAC); and,

D. If the waste is subject to a Land Disposal Restriction and the generator or treater is sending the waste for storage and/or transfer:

- the generator (or the treater) will supply the appropriate LDR notification or certification information and any applicable analytical data. Veolia ES Technical Solutions, L.L.C. will transmit this generator-supplied information and data to the appropriate treatment and/or disposal facility.

(4) other supporting documentation, including any information such as Material Safety Data Sheets, product ingredients, analytical data, etc. (if available).

Veolia – Menomonee Falls will perform the "Mandatory Analyses" on the pre-acceptance sample to provide the facility with the information needed to determine if the waste material matches the identity of the waste designated on the accompanying manifest or shipping paper if the pre-acceptance evaluation is favorable. The analyses also help to ensure that the appropriate storage and/or processing techniques are used. "Supplemental Analyses" may be performed at the direction of site management.

Sampling and analyses will be conducted in accordance with the methods outlined in Sections 3.3 (Analytical Rationale) and 3.2 (Sampling Methodology). After comparing the data supplied by the generator with that obtained from the "Mandatory Analysis," Veolia – Menomonee Falls will determine the acceptability of the waste based on: (1) the permit conditions for Veolia – Menomonee Falls, (2) the availability of appropriate waste management techniques, and (3) the available capacity at the facility. At a minimum, the pre-acceptance evaluation will be repeated: (1) every five years (Veolia – Menomonee Falls has a uniform policy requiring waste to be recharacterized or recertified by the generator every five years) and Veolia – Menomonee Falls feels that recharacterization (or recertification), along with vigilant incoming load screening, is sufficient

to ensure that the information is up to date and that wastes are stored or processed safely at the facility; (2) when the generator notifies Veolia – Menomonee Falls that the process generating the waste has changed (e.g., when the raw materials to the process have changed); or (3) when the results of inspection or analysis indicate that the waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.

Materials that are being recertified by the generator should also be accompanied by the Generator's Wastestream Information Profile form, as shown in Figure 4-1 in Volume I, Appendix A. At a minimum, the generator supplies all the information required by 40 CFR 264.13(a)(1) and (2) and s. NR 664.13(1)(a) and (b), WAC necessary to characterize, treat (process), or store the waste.

3.4.1.1 "Miscellaneous Special Waste"

Exceptions to the forgoing requirements include the following materials which are referred to as "Miscellaneous Special Wastes."

1. Chemical waste from a laboratory. (This is limited to discarded containers of laboratory chemicals, lab equipment, lab clothing, debris from lab spills or cleanup, and floor sweepings). Prior to acceptance of lab packs, Veolia – Menomonee Falls requires its customers to submit a pre-acceptance form listing the proposed contents of each lab pack for review and approval. The customer is required to list the size, physical state and content of each item proposed to be placed into the lab pack. In addition, the list must include the type of absorbent to be used. Veolia - Menomonee Falls personnel review this information and determine if all materials can be accepted by the site. If the customer certifies to the conformance of the lab pack with the requirements of 40 CFR 264.316 and s. NR 664.0316, WAC, Veolia – Menomonee Falls will accept the lab pack for disposal.

2. Commercial Products or Chemicals: off-specification, outdated, unused,

contaminated or banned. (This also includes products voluntarily removed from the marketplace by a manufacturer or distributor in response to allegations of adverse health effects associated with product use).

3. "Empty" containers of waste materials, commercial products, or chemicals. This applies to a portable container which has been emptied, but which may hold residuals of the product or chemical. Examples of containers are: portable tanks, drums, barrels, cans, bags, etc. A container shall be determined "empty" according to the criteria specified at 40 CFR 261.7 and s. NR 661.07, WAC.

   Residue and debris from the cleanup of spills or releases of a single chemical substance or commercial product or a single waste which would otherwise qualify as a miscellaneous special waste.

4. Waste from a medical practitioner, hospital, medical clinic, nursing home, medical testing laboratory, mortuary, taxidermist, veterinarian, veterinary hospital or animal testing laboratory. (NOTE: Discarded chemicals from the above facilities should be treated as "chemical waste from a laboratory", as provided in subsection 1 above).

5. Chemical-containing equipment removed from service. (Examples include cathode ray tubes, batteries, fluorescent light tubes, etc.)

6. Demolition wastes. This consists of waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the process.

7. Asbestos-containing waste from building demolition or cleaning. This applies to asbestos-bearing waste insulation materials, such as wallboard, wall spray coverings, pipe insulations, etc. Asbestos-bearing industrial process

waste is not a "Miscellaneous Special Waste".

8. Articles, equipment and clothing containing or contaminated with polychlorinated biphenyls (PCBs). This would include PCB capacitors or transformers, gloves or aprons from draining operations, empty drums that formerly held PCBs, etc.

9. Containerized wastes temporarily stored at Veolia – Menomonee Falls. Materials to be transferred off-site without treatment or processing are not sampled or analyzed, but do receive a visual inspection.

For these exceptions, the generator will supply Veolia – Menomonee Falls with sufficient information on the chemical and physical characteristics of the waste on the Waste Profile Sheet, form, as shown in Figure 4-1, Appendix D, along with any additional information (e.g., Material Safety Data Sheet, product ingredients). Requests for decisions with respect to wastes defined as "Miscellaneous Special Waste" are to be based only on the generator's written description of the waste. This will enable Veolia – Menomonee Falls to properly manage the waste, but the generator will not normally supply a waste sample. When any of the above "Miscellaneous Special Wastes" are received at the facility for storage or treatment, at a minimum, they will be visually inspected.

- Veolia – Menomonee Falls does not accept wastes containing PCB material at concentration greater than 50 PPM. The sampling and analysis of "Miscellaneous Special Waste" is not required unless specifically requested by site management. These materials are not sampled because they present health and safety hazards (e.g., asbestos), exhibit unusual or impractical sampling and analytical complications (e.g., Lab Packs), and/or are of such a nature that their contents are known in sufficient and reliable chemical and physical detail that sampling and analysis is not necessary (e.g.,

outdated commercial products). The sampling and analysis of other wastes may not be required when the inherent hazards of sampling and analysis is such that it cannot be conducted and any one of the following exist:

- Sampling poses an unnecessary hazard of acute or chronic exposure of Veolia – Menomonee Falls employees to carcinogenic, mutagenic, neoplastigenic, teratogenic, or sensitizing materials; or

- The material may react violently with air or moisture; or

- The sample cannot be reasonably tested, such as a filter cartridge, large piece of contaminated material, or contaminated debris.

3.4.1.2 "Standard Profiles"

"Standard Profiles" may be used for waste streams which are similar in physical and chemical characteristics, generated by similar industries or processes, consistent with the USEPA approach of assigning a listed waste code to similar process wastes.

An analytical database will be developed for a specific "Standard Profile" based on analytical data from waste streams that are representative of wastes from similar industries, processes or historical data. Site management will review the database and determine whether the individual waste streams are sufficiently similar in physical and chemical characteristics to an established "Standard Profile." The analytical database developed as discussed above will replace the requirement for a pre-acceptance sample (see Section 3.4.1) for each individual waste stream.

Specific candidate waste streams which, upon review, are identified as conforming to an existing approved "Standard Profile" will be managed under the existing Waste Management Decision specific for that "Standard Profile".

3.4.2 Evaluation

Site management is responsible for the pre-acceptance evaluation decision (i.e., whether to accept or reject the waste). Figure 4.2 in Appendix D presents a generic logic diagram of the pre-acceptance process. All samples under consideration for acceptance are subjected to the "Mandatory Analyses," except as noted in Section 3.4.1.1. The analyses performed on wastes designated for a management unit are specifically presented in Section 3.6.

If the waste identity indicated by the " Mandatory Analyses" does not conform to the information on the Waste Profile Sheet, then (1) the waste material may be rejected, or (2) the generator is contacted and notified of the discrepancy and allowed to either submit new WPS information or additional pre-acceptance samples.

The site management may require "Supplemental Analyses" to further identify a waste or to screen samples for other contaminants or properties which indicate possible treatment, storage, or processing modes. The basis for requiring these additional analyses are:

- Waste Management technique to be used;
- The experience and judgment of the site management;
- WPS description of the chemical and physical properties of the waste; WPS description of the process generating the waste
- Results of the "Mandatory Analyses"; and
- Any additional documentation supplied by the generator including information that the waste is subject to the Land Disposal Restrictions of 40 CFR Part 268 and ch. NR 668, WAC, if appropriate.

The pre-acceptance evaluation is concluded with documentation of the decision regarding the acceptability of the waste and the proposed method of management. This decision is embodied within the "Special Waste Management Decision" typical form shown in Figure 4-3, Appendix D.

Site management's technical disposal decisions are based on:

- Management methods available;
- Conditions or limitations of existing permits and regulations;
- Capability to manage the waste in a safe and environmentally sound manner;
- WPS description of the process generating the waste;
- WPS description of the chemical and physical properties of the waste; Any additional documentation supplied by the generator, including information that the waste is subject to a Land Disposal Restriction of 40 CFR Part 268 and ch. NR 668, WAC, if appropriate.
- Results of "Mandatory Analyses";
- Results of "Supplemental Analyses", as appropriate; and
- Management's technical experience and judgment.

A waste stream may be rejected during the pre-acceptance phase for the following reasons:

- Incomplete or outdated information supplied by the waste generator;

- Sample analyses and WPS do not agree and the non-conformance cannot be resolved with the generator.

A non-conformance would be defined as a significant difference in composition between the sample and WPS description of the chemical and physical characteristics (e.g., obvious differences such as waste solvent substituted for waste acid or toxic constituents not reported on the WPS):

- Veolia – Menomonee Falls is not permitted to store the particular waste in question (e.g., the waste is explosive, radioactive, or infectious);

- Veolia – Menomonee Falls does not have the capacity to store the waste stream in questions; and

- The waste stream in question cannot be ultimately managed at a Veolia ES Technical Solutions, L.L.C. owned or approved waste management facility.

3.5 Incoming Wastes Shipment Procedures

Each shipment of waste, upon arrival at the facility, is inspected, sampled, and analyzed as defined herein before the initiation of any further activity (except as noted in Section 3.4.1.1). This serves two purposes. First, it compares the actual waste identity with that described in the pre-acceptance phase and that listed on the waste manifest. Second, it further ensures the proper disposition of the waste to appropriate on-site management. Other Veolia ES Technical Solutions, L.L.C. personnel (or a Veolia ES Technical Solutions, L.L.C. approved laboratory) can provide the "Mandatory" and/or "Supplemental Analyses" required prior to or concurrent with the arrival of the load. Materials to be transferred off-site without treatment or processing are not sampled or analyzed, but do receive a visual inspection.

In addition, all wastes that are subject to the Land Disposal Restrictions (40 CFR Part 268 and ch. NR 668. WAC) and have been treated, exempted or varianced or naturally meet the appropriate standard or prohibition must be accompanied by a form from the generator or treater, certifying that the treated, exempted or varianced waste meets the appropriate treatment standard, prohibition, exemption or variance (or that the waste naturally meets the treatment standard or prohibition) and includes the applicable analytical data or reference to such data or documentation (see Section 3.4.1 or a discussion regarding the information and/or data to be supplied by the generator), in accordance with 40 CFR Part 268 and ch. NR 668, WAC.

Furthermore, all wastes which are subject to Land Disposal Restrictions and require treatment, must be accompanied by a form from the generator, notifying the appropriate

treatment standards and all applicable prohibitions which must be met, including any applicable analytical data or reference to such data or documentation (see Section 3.4.1 for a discussion regarding the information and/or data to be supplied by the generator) in accordance with 40 CFR Part 268 and ch. NR 668, WAC.

3.5.1 Receiving Procedures

Incoming load identification begins upon arrival of the waste at the facility. The inspection, sampling, and analysis of the incoming wastes are performed in accordance with the methods described in this Waste Analysis Plan.

Bulk solid and liquid waste deliveries will be sampled and analyzed for applicable "Mandatory Analyses", except as noted in Section 3.4.1.1, and where large volumes of a single waste character are received from a single source, (e.g., a major site cleanup of contaminated soil or water). In such cases of bulk shipments, at least ten percent of such loads will be sampled and analyzed. The compatibility of wastes will be ascertained on the basis of information contained on the WPS and from the results of Veolia – Menomonee Falls tests on the generator's representative sample. The Liquid Waste Compatibility Test (LWCT) may be requested prior to the comingling of bulk liquid shipments. Site management may waive the LWCT if wastes already present in a tank are from the same source and are compatible or a receiving tank is empty and free of any incompatible materials.

Upon delivery of incoming loads of containerized wastes, each shipment is checked against the accompanying manifest to verify drum count and material identification. A sampling frequency of at least ten percent of the containers from each generator's waste stream(s) will be selected for sampling, and applicable "Mandatory Analyses" will be performed for manifest confirmation before releasing the transporter (except as noted above in 3.4.1.1). Container samples that are related to one generator and one process may be composited prior to analysis, providing the individual samples are similar in physical appearance and personnel conducting the compositing receives authorization

and instruction. At a minimum, all remaining containers will be visually inspected. The compatibility of containerized wastes will be ascertained on the basis of information contained on the WPS and from the results of Veolia – Menomonee Falls tests on the generator's representative sample.

If, based on the above information, an incoming load of drums (or selected containers within a load) are potentially incompatible with wastes already in storage, one or more of the following alternative handling procedures will be used at the direction of the site management:

- The subject shipment will be routed directly to the final waste management facility for treatment/disposal;

- Dedicated storage for the incoming drum(s) will be provided;

- Drums, if only a few are involved, will be placed in overpacks or in a plastic-lined box that provides containment for ten percent of the volume of the drums within the box. In either case, such specially isolated containers will be stored in the "most" compatible area and will be positioned with a minimum 5-foot aisle space between them and other drums; or

- The waste stream will be rejected.

The analyses performed on samples submitted to the laboratory is used to ensure that the identity of the waste shipped matches that of the waste designated on the accompanying manifest or shipping papers and to ensure proper storage or processing. In all cases, "Mandatory Analyses" will be performed on each waste steam (except as noted in Section 3.4.1.1).

3.5.2 Decision Evaluation Logic

The general logic utilized by the site management in deciding whether to accept or reject a particular waste is depicted in Figure 5-1, Appendix D. Major decision points, identified in Figure 5-1, are as follows:

- The need for "Supplemental Analyses";
- The actual waste identification;
- An evaluation of whether a waste is found to be in conformance or nonconformance; and
- An evaluation of whether wastes found to be in non-conformance can still be accepted or should be rejected.

Site management decides whether "Supplemental Analyses" are required for a particular waste based on the following:

- Results of "Mandatory Analyses";
- Knowledge of generator and/or waste-generating process;
- Results of pre-acceptance evaluation;
- Limitations of the targeted waste management unit; and
- Experience and judgment of site management in determining the need to know more information.

Further testing will be required if the results indicate unexpected information with respect to pre-acceptance analytical results, or if the site management has reason to suspect that the waste composition has changed.

The effectiveness of the waste identification step is dependent on the following components:

- Inspection;
- Sampling (if applicable);
- Analytical results;
- Waste Profile Sheet;
- Any additional documentation supplied by the generator, such as "Material Safety Data Sheets", product ingredients, etc.;
- Waste Manifest;
- Appropriate Land Disposal Restriction Certification Notification form, (if necessary);
- Pre-acceptance analytical results; and
- Site management's judgment.

Site management must classify the waste as being in "non-conformance" if it is significantly different in composition or volume from the information shown in the WPS, the pre-acceptance results, or on the manifest, in accordance with 40 CFR 264.72 and s. NR 664.0072, WAC. Four major criteria are used to arrive at this decision. They are:

1) For bulk wastes, variations greater than 10 percent in weight;

2) For containerized wastes (e.g., drums, bags, etc.) any variation in piece count;

3) Inspection or analysis of any waste that determines obvious differences, such as waste solvent substituted for waste acid, or toxic constituents not reported on the WPS or manifest or shipping paper; and

4) Any manifest or other discrepancy that changes the originally approved method of management.

Manifest discrepancies or non-conformances that do not fall within these criteria are considered to be "minor" and are not subject to recertification or recharacterization review unless Veolia – Menomonee Falls has reason to believe that the variation is a continuing deviation and that a particular waste stream differs from its documented values. Significant discrepancies in waste type, as defined by the last two criteria above, result in recharacterization only if the discrepancy cannot be reconciled with the generator or Veolia – Menomonee Falls has reason to believe that the waste composition has changed.

Wastes found to have a manifest discrepancy or be in non-conformance as defined by the four criteria above may be rejected, or they may be re-evaluated for possible acceptance by the facility despite the variance. Veolia – Menomonee Falls re-evaluation procedure is designed to determine whether the waste material shipped, (i.e., not consistent with WPS and/or manifest data), can be safely managed at the Facility, provided that the generator concurs with the Veolia – Menomonee Falls conforming analysis. This procedure is intended to prevent the unnecessary movement of a waste material between the facility and the generator, when the material can be readily managed by the facility. By eliminating this unnecessary movement, Veolia – Menomonee Falls is attempting to reduce further exposure of this waste to the environment. The re-evaluation will be based on the following criteria:

- Permit authorization;
- Discussions with the generator;
- Facility parameters for storage and/or processing;
- Site management's judgment;
- Results of "Mandatory Analysis";

- Results of any “Supplemental Analysis”; and
- 40 CFR Part 264 and ch. NR 664, WAC requirements.

If all of the above criteria and results of the "Supplemental Analyses" indicate the waste can be accepted and the generator concurs, a new waste disposal decision form is prepared by site management. Pursuant to 40 CFR 264.72 and s. NR 664.0072, WAC, site management will discuss and attempt to resolve with the generator any discrepancies between the received waste and that shown in the manifest. If the discrepancy cannot be resolved within 15 days of shipment receipt, site management will notify the EPA Regional Administrator (or agency administering the RCRA program) of the discrepancy and the attempts to reconcile it, in writing, and provide a copy of the involved manifest.

A waste load may be rejected for one of the following reasons:

- The generator' s/transporter's paperwork is not in order;
- A manifest discrepancy cannot be resolved to the generator's and Veolia – Menomonee Falls satisfaction;
- Adequate segregated space is not available within the container storage area for containerized wastes, and special handling cannot be used to correct the deficiency;
- The bulk shipment is incompatible with wastes already contained in storage and no alternative temporary management method is available; or
- On-site bulk liquid storage tanks are full.

3.6 Process Operations Procedures

Each movement of a waste within a facility during which any change in its characteristics may occur makes the waste subject to additional inspection, sampling, and analysis to determine appropriate handling and management of the waste. Many of the analyses needed for the storage or treatment functions are performed during incoming waste identification. These are not repeated unless it is known or believed that the waste characteristics may have changed during storage or processing.

Anticipated process operations at the facility, for which current and periodic sampling and analyses are important, include the following:

- Storage or;
- Treatment, (consolidated into bulk storage)
  or
- Treatment (Stabilization).

The analytical procedures for each of these processes are described separately below.

3.6.1 Storage

Before any wastes are placed in a storage unit, the site management will assess the compatibility of the waste with the storage unit materials of construction and with wastes already stored therein. The general analytical flow diagram for storage of wastes is shown in Figure 6-1, Appendix D.

3.6.1.1 Waste in Containers

Stored containerized wastes are segregated with respect to ignitability and other compatibility. The U.S. DOT Hazardous Precedence List (49 CFR 173.2) and the Segregation and Separation Chart of Hazardous Materials (49 CFR 177.878) shall be employed for the initial determination of compatibility. Using the predominant hazard

classification of incoming waste, the proper storage area will be designated to ensure separation of stored incompatible wastes.

The following table lists hazard classes with incompatible hazard classes for wastes in container storage areas.

HAZARD CLASS	INCOMPATIBLE HAZARD CLASSES
Flammable Liquid	Oxidizer, Organic Peroxide
Flammable Solid	Corrosive, Water-based Oxidizers
Oxidizer or Organic Liquids Peroxide	Corrosive, Flammable
Corrosive (acids)	Oxidizer, Organic Peroxide, Flammable Solids, Corrosive (bases)

Based on the initial hazard determination and final identification of the waste, the drummed waste will be segregated in the following manner. Flammable, corrosive, and oxidizing waste materials will be separated from incompatible materials by storage in separated containment areas within the container storage unit.

3.6.1.2 Waste in Tanks

Liquid wastes which are delivered in bulk form by tank trucks or decanted from drums or portable tanks are placed in bulk storage tanks prior to further treatment (i.e., transfer off site). Prior to transferring any wastes into a storage tank, the compatibility of the waste with the material already in that tank will be determined using the liquid waste compatibility test (LWCT). Following routine preliminary screening using a chemical compatibility chart, specific storage and process compatibility will be determined. The parameters that will be used to determine

compatibility are as follows:

- Stratification - The general miscibility of the materials will be examined. If stratification would appear to create a problem, the materials will not be combined
- Heat Generation - Materials that, upon mixing, generate large amounts of heat or undergo exothermic reaction shall not be combined.

- Gas Evolution - Materials that, upon mixing, liberate flammable, explosive, or toxic vapors, fumes, or mists shall not be combined.

- Undesirable Reactions - Materials that, upon mixing, bubble, spatter, or fume; solidify or gel; or form a precipitate shall not be combined.

When a shipment arrives that is to be pumped into a tank, a sample of the shipment will be tested with a representative sample of the tank contents into which the waste is to be pumped. Compatibility characteristics listed above will be examined.

If the mixture fails any of the compatibility tests (LWCT), the waste will not be pumped into the receiving tank. If the waste is determined to be incompatible with the tank materials of construction or with then-present tank contents, the procedure will be repeated for an alternate tank.

3.6.2 Treatment Operations

The proper and complete treatment of a particular waste depends upon the appropriate sampling and analysis during selected phases of the operation. The results of this analytical program serve to determine safety constraints, confirm treatment method selection, and identify the process parameters. In addition, these analyses provide data to site management enabling the sound and environmentally safe handling of all

wastes to prevent adverse reactions or impacts resulting from waste management operations. In general, the treatment sampling/analysis program may be divided into three segments, each with a specific purpose:

- Pre-treatment analyses confirm that the waste falls within the selected process design and allow the fine tuning of the process operational conditions for optimum treatment;

- In-process analyses are performed to control the process and to monitor progress; and

- Post treatment analyses confirm successful treatment and that the characteristics of the process effluent are such that it can be sent to the next step (disposal, or further treatment), based upon permit, regulatory or process constraints. Waste or residues resulting from the on-site treatment of Land Disposal Restricted wastes will be analyzed and/or evaluated, as needed, against the appropriate treatment standards or prohibitions. Any residues or waste sent off-site for disposal or further treatment will have the appropriate notification and/or certification form (in accordance with 40 CFR Part 268 and ch. NR 668, WAC).

3.6.2.1 Decanting

In this process, free liquids are decanted from drums or other small containers into larger bulk storage units where they may be separated into immiscible fractions and segregated prior to processing off site. The general analytical procedure is shown in Figure 6-2, Appendix D.

The pre-treatment analyses serve to segregate compatible groupings of containerized wastes for decanting. This is accomplished by appropriate tests, data from the WPS, and knowledge of the waste source. The pre-treatment analyses are conducted for each waste container (or composite sample) before the decant operation.

After the liquid contents have been removed and the phases have been separated, in-process analyses indicate the identity of each phase so that the proper disposition can be made. Samples of the phases are collected from the separator.

3.6.2.2 Stabilization

Stabilization is a process by which wastes can be treated to remove free liquid, producing a mixture that has (1) no free liquids, and (2) sufficient structural integrity for landfilling.

In addition, stabilization can be used to treat (i.e., immobilize) or reduce the toxicity of certain inorganic wastes (including some Land Disposal Restricted (LDR) compounds). In this process, the wastes are mixed with a stabilizing agent (e.g., lime, cement kiln dust, etc.), and/or other suitable reagents, (i.e., oxidizing and reducing agents, etc.) that cause a chemical reaction, producing a treated mixture suitable for land disposal. The general approach, shown in figure 6-3 Appendix D, is implemented for each batch treatment.

3.6.2.3 Stabilization of Liquid Wastes and Wastes Containing Free Liquids

Pre-treatment analyses for these wastes consist of the basic "Mandatory Analyses" performed on the pre-acceptance sample and incoming shipments. In addition, the Stabilization Evaluation Test (S.E.T.) may be performed on the pre-acceptance sample to ensure the waste's amenability to stabilization and to establish a mix ratio to be used as a guideline when the actual shipment of the waste material is received for stabilization. Upon receipt, the waste shipment will be sent to the stabilization treatment unit. It may be stabilized using the guideline mix ratio developed from the (S.E.T.) procedure performed during the Pre-Acceptance Procedures. Post-treatment analysis may consist of the paint filter test to ensure no free liquids are present in addition to the TCLP analysis.

In addition, "Supplemental Analyses" may be requested by site management to further evaluate the suitability of the stabilized waste for landfill disposal. There are no in-process analyses.

On occasion, a waste shipment of an ordinarily solid material may arrive containing a minimal amount of free liquids. These waste shipments may be rejected or they may be stabilized. If stabilized, the shipment will be unloaded into the stabilization unit and the stabilization reagent will be blended into the waste until a homogeneous mixture is observed. Post-treatment analysis may consist of the paint filter test and/or TCLP analysis.

3.6.2.4 Pre-Treatment and Stabilization of Land Disposal Restricted Wastes

In this process, certain Land Disposal Restricted (LDR) wastes are treated to meet the appropriate LDR treatment standard or prohibition. For the purposes of this discussion, treatment will include, at a minimum, stabilization of the waste and, in some instances, will include a pre-treatment step prior to stabilization. The pre-treatment may include using other reagents such as oxidizing or reducing agents to chemically convert constituents in the waste into a form more suitable for stabilization.

The pre-treatment analyses for Land Disposal Restricted waste to be treated to meet a particular treatment standard or prohibition consist of the "Mandatory Analyses" performed on the pre-acceptance sample and incoming waste shipment. In addition, a portion of the pre-acceptance sample may be treated and then analyzed, using the appropriate test method TCLP to demonstrate that the LDR waste can be treated to meet the appropriate standard or prohibition and to establish the treatment guidelines to be used to treat each waste shipment.

Upon receipt, the LDR waste shipment will be sent to the stabilization treatment unit for treatment. The treatment guidelines, established during the pre-acceptance procedures and demonstrated to achieve the appropriate treatment standard, will be

used to treat each shipment of that LDR waste. Veolia – Menomonee Falls will conduct post-treatment analysis on the residue as needed to ensure that the process continues to be effective in meeting the treatment standards. The current post-treatment analysis protocol specifically addresses processes, frequency analyses and corrective action. The treated residue is typically stored in portable containers (e.g., roll-off bins, lugger boxes, etc.) while awaiting the results of the post-treatment analysis.

For wastes approved by the WDNR, a reduced sampling and analysis frequency from that identified in Condition 32(b) of the Final Determination dated September 30, 1993, may be utilized. For these wastes, only the first and last boxes of treated waste from the treatment run will be sampled and analyzed in order to ensure that the process continues to be effective in meeting the treatment standards. A treatment run consists of the treatment of multiple waste shipments treated using similar recipes.

3.7 Quality Assurance/Quality Control

3.7.1 Introduction

The following Quality Assurance/Quality Control (QA/QC) information for Veolia – Menomonee Falls is being provided as required by 40 CFR 270.30(e) and s. NR 670.030(5), WAC and in accordance with the following EPA guidance documents.

- Test Methods for Evaluating Solid Waste: Physical Chemical Methods, Section Ten, SW-846, Third Edition – Update IV, January 2008, and subsequent revisions.

- Waste Analysis Plans - A Guidance Manual, OSWER 9938.4-03, April 1994.

QA/QC procedures are applicable to both sampling procedures and analytical techniques. QA/QC information for these two elements of the waste analysis program has been included in this Waste Analysis Plan (WAP), as recommended in the Waste Analysis

Plan Guidance Manual.

This appendix does not provide specific performance standards or quality control procedures for individual sampling and analysis techniques. Such specifics are defined on a corporate-wide basis for all Veolia ES Technical Solutions, L.L.C. facilities. The specific performance standards are dynamic documents and are revised to reflect technological advances in sampling and analytical techniques. Veolia ES Technical Solutions, L.L.C. QA/QC policies are found in the corporate Quality Control Policy, portions of which have been summarized in the following sections.

3.7.2 Sampling Program

Sampling procedures for specific facility operations are described in Section 3.2 of the WAP.

The selection of the sample collection device depends on the type of sample, the sample container, and the sampling location. In general, the methodologies used for specific materials correspond to those referenced in 40 CFR 261, Appendix I and ch. NR 661, Appendix I, WAC.

Sampling equipment is constructed of non-reactive materials such as glass, PVC plastic, aluminum, or stainless steel. Care is taken in the selection of the sampler to prevent contamination of the sample and to ensure compatibility of materials. For example, non-fluorocarbon plastic bottles are not used to sample organic wastes and glass bottles are not used to collect hydrofluoric acid wastes.

Sampling is performed for each waste stream in a manner that ensures the samples are as representative as possible under the conditions of the sampling event. Full vertical sections are drawn from tanks and containers, where appropriate and where access allows.

With a few exceptions, all bulk and containerized waste loads will be sampled (see Section 3.4.1.1 of the WAP). Container samples that are related to one generator and one process may be combined into a composite sample prior to analysis, provided that individual samples are similar in physical appearance.

3.7.3 Analytical Program

Veolia – Menomonee Falls uses standard analytical procedures recognized by the EPA (SW-846 in particular) and ASTM. Additionally, some unique procedures and protocols formulated by Veolia ES Technical Solutions, L.L.C. have been found to be preferable. A complete listing of these procedures is found in Section 3.3 and Appendix D.

All test equipment maintained at the site is calibrated to within acceptable limits according to EPA or manufacturer specifications immediately prior to use. Laboratory instruments are periodically inspected, maintained, and serviced according to manufacturer specifications.

Reference standards and QC samples (e.g., checks, spikes, laboratory blanks, duplicates, splits) are used to determine the accuracy and precision of procedures, instruments, and operators. All such QA/QC data are recorded with the test results by the technician. Records of all pertinent laboratory calibration, analytical, and quality control activities and data are maintained at the site. The following specific practices are implemented at this facility laboratory.

3.7.3.1 Instrument Performance Parameters

All instrumentation must be evaluated through the use of an instrument check standard and calibration blank. Divergence from acceptable benchmark criteria requires correction. Blank and instrument check standard results are recorded. The record may also contain evaluation parameters, benchmark criteria, and maintenance records.

3.7.3.2 Contamination Evaluation

Reagent blanks are typically prepared with each batch of samples and analyzed to ensure sample contamination has not occurred. If blank analyses do not fall within acceptable limits, modification of reagents or modification of the analytical method is implemented.

3.7.3.3 Duplicate Analyses

Duplicates are employed to monitor precision in the laboratory. Typically, a ratio of one duplicate for each twenty samples analyzed is maintained.

3.7.3.4 Quality Control Check Sample

A quality control material is analyzed at least every day the parameter is performed.

This procedure is performed to show that calibration and standardization of instrumentation is within accepted limits. This procedure informs the laboratory that prescribed precision and accuracy are being maintained. Results of these analyses are reported quarterly to the Quality Assurance Programs office.

3.7.3.5 Fortification of Samples

Fortifications are employed to monitor recoveries and maintain extraction and/or concentration techniques at acceptable levels. This procedure provides information about the effect of the sample matrix on the analyte in question. Typically, a ratio of one fortification for each twenty samples analyzed is maintained. In general, the same sample used for the duplicate analysis is fortified according to the method prescribed in the procedures manual.

3.7.3.6 Reference Materials

When available, Standard Reference Materials (SRM) from the National Bureau of Standards and Technology (formerly known as the National Bureau of Standards), the

Environmental Protection Agency, or any other recognized source, are obtained and analyzed according to normal laboratory methodology to verify accuracy of the methods. In general, these materials are analyzed on a quarterly basis.

3.7.3.7 Round Robin Analyses

The Veolia ES Technical Solutions, L.L.C. laboratory participates in round robin sample analyses. These samples are submitted to the Menomonee Falls laboratory by the Quality Assurance Programs office or state certifying agency for the analysis of specified parameters. Results are reported to the Quality Assurance Programs office or state certifying agency. Digressions from the norms established by the majority of laboratories participating are investigated and corrected.

3.7.4 Reports

The facility reports the following information (or a summary of this information) on a quarterly basis:

- Number of samples analyzed;
- Number and results of duplicates;
- Number and results of fortifications;
- Instrument used;
- Frequency of occurrence for quality control check; sample within acceptable limits; and
- Mean and standard deviation of analyte in question.

3.7.5 Conclusion

The sampling and analytical procedures described above help ensure that the data obtained are precise, accurate, and representative of the waste stream being sampled. The results of these analyses are used by site management to decide whether or not to accept a particular waste and, upon acceptance, to determine the appropriate method of storage and treatment. They are also important to ensure that wastes are managed properly by the facility and that incompatible wastes are not inadvertently combined. For these reasons, the quality of the data, thoroughness and care with which the sampling and analyses are performed and reported provide an important basis for day-to-day operational decisions.

Section III

APPENDIX A

WASTE ANALYSIS PLAN

WAP - A

ANALYTICAL PROCEDURES

WAP-A ANALYTICAL PROCEDURES

Analytical methods described herein are grouped in accordance with the three categories identified in Section 3.3 of the Waste Analysis Plan. It should be noted that the information presented in this Appendix is generic in character. Therefore, certain test methods discussed in this Appendix may pertain to treatment or disposal processes that are excluded from the Veolia – Menomonee Falls Facility.

The "Mandatory Analyses" described in Section I of this Appendix are performed on pre-acceptance and incoming load samples (for exceptions, see Section 3.4.1.1).

I. " MANDATORY ANALYSES"

The following mandatory analytical procedures are designed to identify or screen specific waste. They are used by Veolia – Menomonee Falls, based upon its operating experience, as rapid but effective means for establishing key decision parameters pertinent to proper waste management.

Physical Description (ASTM D4979) - Samples are inspected and the physical appearance of the waste including color, physical state and layering is recorded

pH Screen (ASTM D4980) - Full-range pH paper is used directly on liquid samples. For solid samples, a 10:1 water-to-solid mixture is made and tested.

Water Mix (ASTM 5058 Test Method C) - An aliquot of waste is mixed with water in a 10:1 ratio (water:waste) under cover of a hood. If the waste is water-reactive (i.e., bubbles, fumes or spatters), generation of gases, heat, or turbulence is recorded.

Flammability Potential Screen (ASTM D4982) - A small amount of waste sample is placed into an aluminum weighing boat (or similar laboratory container) and a flame is very briefly applied to the sample. Positive or negative flammability potential is then recorded.

Cyanide Screen (ASTM D4978 Test Method B) - To a portion of sample, enough caustic is added to bring the pH to greater than 12; then solutions of ferrous sulfate and ferric chloride are added. Concentrated sulfuric acid is then slowly added to bring the pH down to 1.0 or less. A bright blue or green color indicates the presence of cyanide.

Sulfide Screen (ASTM D4978) - Hydrochloric acid is slowly added to an aliquot of waste in the presence of lead acetate paper. If the paper turns brown or silvery black, the presence of sulfides in the sample is indicated.

IL "SUPPLEMENTAL ANALYSES"

A. Unique "Supplemental Analyses"

The following analytical procedures have been found by Veolia to provide important quantitative information pertinent to certain processes. In some cases, these tests have been developed by Veolia to provide information not available from "Standard Methods" in Section B which follows. In other cases, these tests are substituted for "Standard Methods" where they provide sufficient equivalent information.

Stabilization Evaluation - The waste to be stabilized is mixed with at least one ratio of cement kiln dust or other suitable reagents. A determination is made for the waste to dust ratio whether or not it will pass the paint filter test (no free liquid) or other appropriate treatment standard. In addition, any heat change (curing) which occurs is recorded as the waste/cement kiln dust mixture is "setting". This is measured with a thermometer or digital thermometer with probe. The occurrence of any violent

reactions of reagent to waste sample is to be noted.

Dissolved Sulfides - An aliquot of waste is mixed with distilled water. The solution/slurry is filtered through filter paper and the resultant filtrate is then analyzed for sulfide. Saturated antimony potassium tartrate and 1:1 hydrochloric acid are added and the color produced is visually compared with standards.

Solvent Screen - Uses "standard methods" tailored to the compound class being analyzed.

Cyanide - Conversion Amenable - To 100 g of waste in a 250 ml beaker, add 2 ml of 10 N NaOH and 5.0 g proprietary reagent. If the waste is a solid or heavy sludge, add 100 ml water, or more if the sample is difficult to stir. Cover with a 10 cm watchglass and heat to boiling, agitating the sample with a magnetic stirrer. Boil 30 minutes, remove from heat, transfer liquid portion of sample and at least 3 washings to a 1 liter volumetric flask, and dilute to the mark.

Shake the 1 liter flask a few times to ensure proper mixing of contents, pour 100 ml into a 250 ml beaker, and drop-wise add 10% Cd $(NO_3)_3 4H_20$ until precipitation ceases. Using a dropper, add 50% HNO_3 until the pH is in the range 5 to 7. Filter the sample through filter paper, and transfer 1 ml of the filtrate to a 50 ml volumetric flask. Add 5 ml $Fe(NO_3)_3$ solution, and dilute to 50 ml. Compare the solution to standards visually, or use a spectrophotometer at 480 nm (4800A). If a spectrophotometer is used, prepare a blank containing 5 ml $Fe(NO_3)_3$ solution diluted to 50 ml with distilled water.

Radioactivity Screen - A sample of waste material is passed by a geiger counter or survey meter. Radioactivity levels above background are noted recorded and investigated.

Quick Leach Extraction Procedure - A designated amount of sample is mixed with the appropriate extraction fluid and stirred for a designated time period. After filtration, the pH and/or

metals content are determined using the appropriate approved methods.

Phenol Screen - After extraction and pH adjustment, the sample is mixed with screen agents. Phenolic materials react with 4-aminoantipyrine in the presence of potassium ferricyanide at a pH of 10, to form a stable reddish-brown colored antipyrine dye. The generation of color indicates phenolics.

B. "SUPPLEMENTAL ANALYSES" USING STANDARD TECHNIQUES

The procedures and protocol for these standard analyses are referenced as follows:

PARAMETER	METHOD	REFERENCE
Flash point		
	Pensky-Martens closed-cup method	1-1010
	Setaflash closed-cup method	1-1020
	Cleveland open-cup	3-d92
Sample Work Up Techniques:		
	Inorganic Techniques	
		Acid digestion procedure for flame atomic absorption spectroscopy 1-3010
		Acid digestion procedure for furnace atomic absorption spectroscopy 1-3020
		Acid digestion of oils, greases, or waxes 1-3030
		Dissolution procedure for oils, greases, or waxes 1-3040
		Acid digestion of sludges (reserved) 1-3050
		Alkaline digestion (for solids) 1-3060
	Organic Techniques	
		Separatory funnel liquid-liquid extraction 1-3510
		Continuous liquid-liquid extraction 1-3520
		Acid-base clean-up extraction 1-3530
		Soxhlet extraction 1-3540
		Sonication extraction 1-3550
Inorganic Analytical Methods:		
	ICAP	1-6010
	Antimony	
		Atomic absorption, direct aspiration method 1-7040
		Atomic absorption, graphite furnace method 1-7041
	Arsenic	
		Atomic absorption, furnace method 1-7060
		Atomic absorption, gaseous hydride method 1-7061
	Barium	
		Atomic absorption, direct aspiration method 1-7080
		Atomic absorption, furnace method 1-7081
	Beryllium (reserved)	
		Atomic absorption, direct aspiration method 1-7090
		Atomic absorption, furnace method 1-7091

PARAMETER	METHOD	REFERENCE
Cadmium		
	Atomic absorption, direct aspiration method	1-7130
	Atomic absorption, furnace method	1-7131
Calcium		
	Atomic absorption, direct aspiration method	4-215.1
	Atomic absorption, furnace method	4-215.2
Chromium		
	Atomic absorption, direct aspiration method	1-7190
	Atomic absorption, furnace method	1-7191
	Hexavalent chromium: Co-precipitation	1-7195
	Hexavalent chromium: Colorimetric	1-7196
	Hexavalent chromium: Chelation-extraction	1-7197
Copper		
	Atomic absorption, direct aspiration method	1-7210
	Atomic absorption, furnace method	1-7211
Iron		
	Atomic absorption, direct aspiration method	4-236.1
	Atomic absorption, furnace method	4-236.2
	Phenanthroline method (ferrous)	2-315B
Lead		
	Atomic absorption, direct aspiration method	1-7420
	Atomic absorption, furnace method	1-7421
Magnesium		
	Atomic absorption, direct aspiration method	4-242.1
Manganese		
	Atomic absorption, direct aspiration method	4-243.1
	Atomic absorption, furnace method	4-243.2
Mercury		
	In liquid waste (manual cold-vapor technique)	1-7470
	In solid or semi-solid waste (manual cold-vapor technique)	1-7471
Nickel		
	Atomic absorption, direct aspiration method	1-7520
	Atomic absorption, furnace method	1-7521
Osmium		
	Atomic absorption, direct aspiration method	1-7550
	Atomic absorption, furnace method	1-7551
Selenium		
	Atomic absorption, direct aspiration method	1-7740
	Atomic absorption, furnace method	1-7741

PARAMETER	METHOD	REFERENCE
Silver		
Atomic absorption, direct aspiration method		1-7760
Atomic absorption, furnace method		1-7761
Thallium		
Atomic absorption, direct aspiration method		1-7840
Atomic absorption, furnace method		1-7841
Vanadium		
Atomic absorption, direct aspiration method		1-7910
Atomic absorption, furnace method		1-7911
Zinc		
Atomic absorption, direct aspiration method		1-7950
Atomic absorption, furnace method		1-7951
Organic Analytical Methods		
Halogenated Volatile Organics		1-8010
Non-halogenated Volatile Organics		1-8015
Aromatic Volatile Organics		1-8020
Arcolein, Acrylonitrile, Acetonitrile		1-8030
Phenols		1-8040
Phthalate Esters		1-8060
Organochloride Pesticides and PCBs		1-8080
Nitroaromatics and Cyclic Ketones		1-8090
Chlorinated Hydrocarbons		1-8120
Polynuclear Aromatic Hydrocarbon		1-8100
Organophosphate Pesticides		1-8140
Chlorinated Herbicides		1-8150
GC Scans		3-E260
Gas Chromatographic/Mass Spectoroscopy Methods:		
GC/MS Method for Volatile Organics		1-8240
GC/MS Method for Semi-Volatile Organics: Packed Column Technique		1-8250
GC/MS Method for Semi-Volatile Organics: Capillary Column Technique		1-8270
Miscellaneous Analytical Methods:		
Total Cyanide		2-412B
Free Cyanide		2-412G
Total Organic Halides		1-9020
Total Sulfides		2-427A
pH Measurement		1-9040; 9041; 9045; 2-423
Total Organic Carbon		2-505; 3-D2579
Acidity		2-402

PARAMETER	METHOD	REFERENCE
Alkalinity		2-403
Filterable Residue		2-209C
Non-filterable Residue		2-209B
Total Residue		2-209A
Viscosity		3-by material
Extraction Procedure		1-1310
Total Chlorine		3-D808-81
Specific Gravity		3-D1298-67, D5057
Organics		5
Fluoride		2
Paint Filter Test		1-9095
Petroleum Hydrocarbons, Total, Recoverable		4-418.1
Toxicity Characteristic Leaching Procedure(TCLP)		1-1311
Liquid Waste Compatibility Test		3-D5058A
Oxidizer Screen		3-D4981
Halogen Content		3-D4327
Ash Content		2-209D
Oil & Grease		2-503, A,B,C,D
Phenols		2-510A,B,C,D; 4-420.1

The above-referenced procedures are described in the following publications. The first digit of the reference numbers above are keyed to the numbers shown below:

1- "Test Methods for Evaluating Solid Waste," 2nd edition, SW-846, U.S. Environmental Protection Agency, Office of water and Waste Management, Washington, DC 20406, 1982, with April 1984 revision, or most recent edition.

2- "Standard Methods for the Examination of Water and Waste Water", 15th edition, American Public Health Association, 1980, or most recent edition.

3- "Annual Book of ASTM Standards," American Society for Testing Materials, 1916 Race Street, Philadelphia, PA 19013, or most recent edition.

4- "Methods for Chemical Analysis of Water and Wastes," EPA-600/4-79-020, U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Cincinnati, OH 45268, March 1979, or most recent edition.

5- Infrared Analysis Method in IERL-RTP Procedures Manual: Level 1 Environmental Assessment (2nd Edition), EPA-600/7-78-201, October, 1978, or most recent edition.

Standard techniques not listed here, which may be needed, will be taken from the above-referenced sources or other recognized sources.

WAP-B

SAMPLING EQUIPMENT

DIPPER SAMPLER

Description:

The dipper sampler consists of a glass or plastic beaker clamped to the end of a 2- or 3-piece telescoping aluminum or fiberglass pole which serves as the handle. A dipper samples liquids and free-flowing slurries. Dippers are not available commercially and must be fabricated to conform to desired specifications.

Procedures for use:

1. Clean beaker, clamp, and handle.

2. Assemble dipper by bolting adjustable clamp to the pole. Place beaker in clamp and fasten shut.

3. Turn dipper so the mouth of the beaker faces down and insert into waste material. Turn beaker right side up when dipper is at desired depth. Allow beaker to fill completely as shown by the cessation of air bubbles.

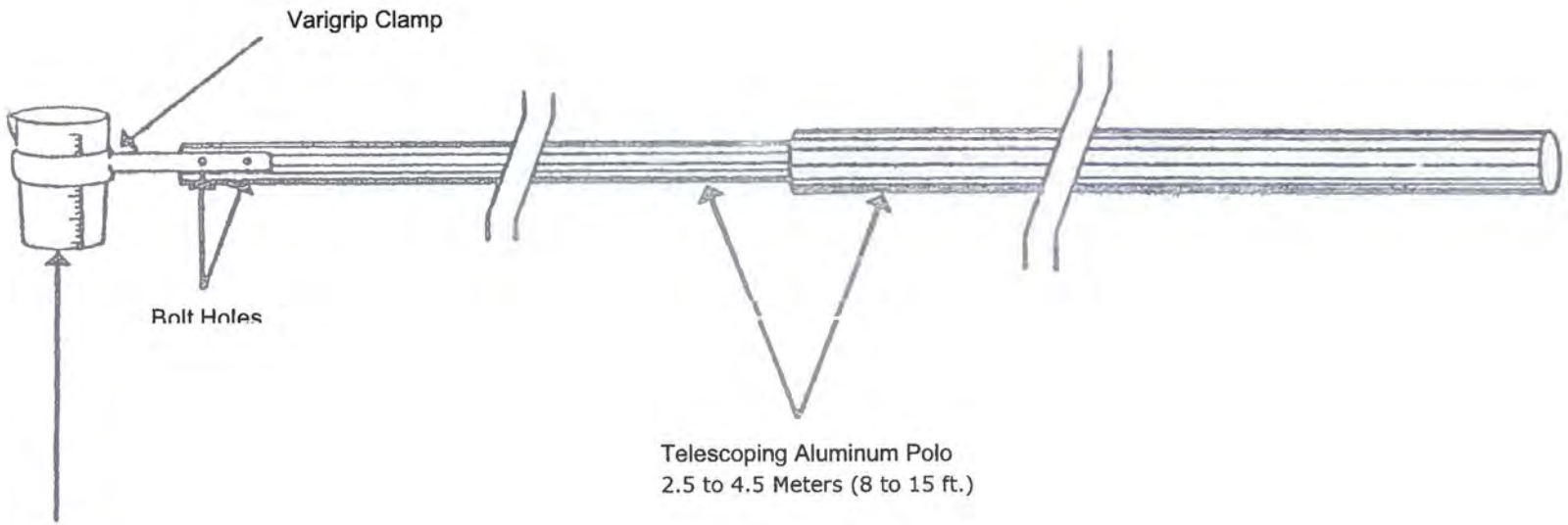
4. Raise dipper and transfer sample to container.

General Comments and Precautions:

1. Do not use a non-fluorocarbon plastic beaker to sample wastes containing organic materials.

2. Do not use a glass beaker to sample wastes of high pH or wastes that contain hydrofluoric acid.

3. Paint aluminum pole and clamp with a 2-part epoxy or other chemical-resistant paint when sampling either alkaline or acidic wastes.


Varigrip Clamp
Bolt Holes
Telescoping Aluminum Polo
2.5 to 4.5 Meters (8 to 15 ft.)
Beaker
150 w 600 ml

Dipper

WEIGHTED BOTTLE SAMPLER

Description:

This sampler consists of a glass or plastic bottle, sinker, stopper, and a line which is used to lower, raise, and open the bottle. The weighted bottle samples liquids and free-flowing slurries.

Procedures for use:

1. Clean bottle.

2. Assemble weighted bottle sampler.

3. Lower the sampler to desired depth and pull out the bottle stopper by jerking the line.

4. Allow bottle to fill completely as evidenced by cessation of air bubbles.

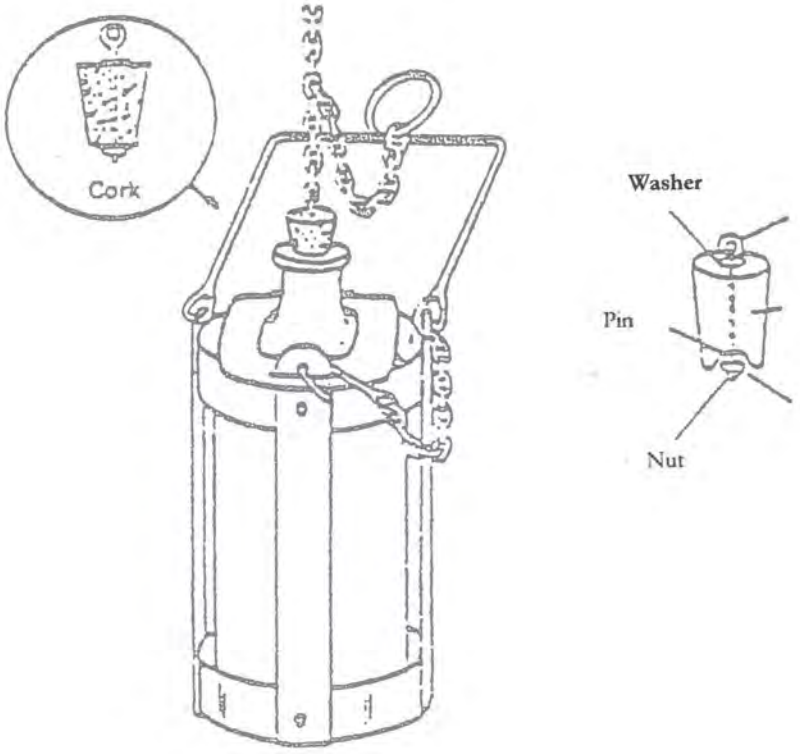
5. Raise sampler, cap, and wipe off with a disposable cloth. The bottle can serve as a sample container.

General Comments and Precautions:

1. Do not use a non-fluorocarbon plastic bottle to sample wastes containing organic materials.

2. Do not use a glass bottle to sample wastes that contain hydrofluoric acid.

3. Before sampling, ensure that the waste will not corrode the sinker, bottle holder, or line.



Weighted. bottle sampler

COMPOSITE LIQUID WASTE SAMPLER

(Coliwasa)

Description:

The Coliwasa is a device used to sample free-flowing liquids and slurries contained in drums, shallow open-top tanks, pits; and similar containers. It is especially useful for sampling wastes that consist of several immiscible liquid phases. It consists of a glass, plastic, or metal tube equipped with an end closure which can be opened and closed while the tube is submerged in the material to be sampled. The Coliwasa is available commercially or can be fabricated to conform to desired specifications.

Procedures for Use:

1. Clean Coliwasa.

2. Adjust sampler's locking mechanism to ensure that the stopper provides a tight closure. Open sampler by placing stopper rod handle in the T-position and pushing the rod down until the handle sits against the sampler's locking block.

3. Slowly lower the sampler into the waste at a rate that permits the level of liquid inside and outside the sampler to remain the same. If the level of waste in the sampler tube is lower inside than outside, the sampling rate is too fast and will produce a non-representative sample.

4. When the sampler hits the bottom of the waste container, push the sampler tube down to close and lock the stopper by turning the T-handle until it is upright and one end rests on the locking block.

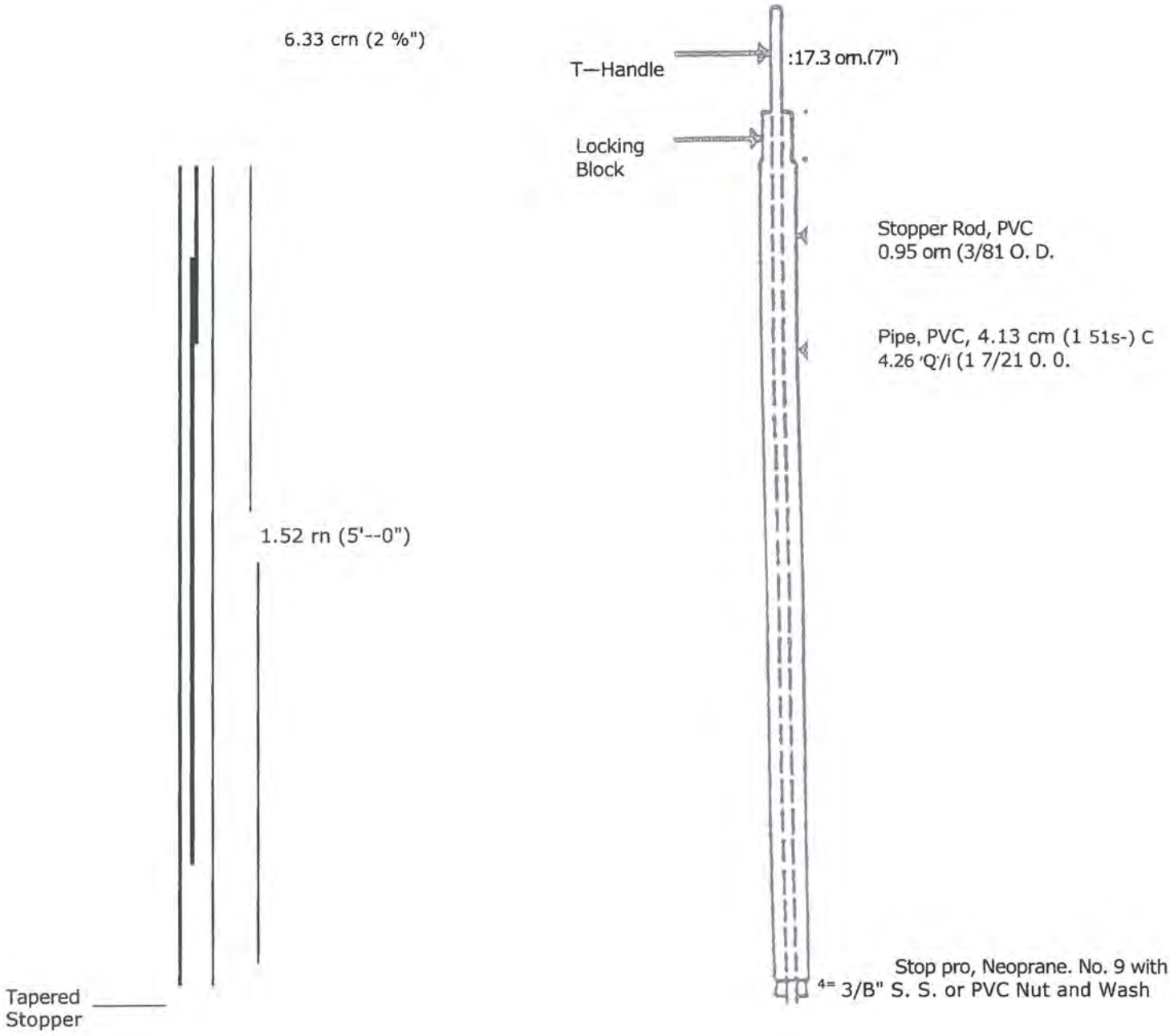
5. Withdraw Coliwasa from waste and wipe the outside with a disposable cloth or rag.

General Comments and Precautions:

1. Do not use a plastic Coliwasa, unless it is constructed of fluorocarbons (e.g., Teflon), to sample wastes containing organic materials.

2. Do not use a glass Coliwasa to sample liquids that contain hydrofluoric acid.

3. If significant amounts of solid material are present within 2 inches of the bottom to the container to be sampled, special procedures will be necessary to obtain a representative sample of this solid phase.



Composite liquid waste sampler (Coliwasa)

THIEF SAMPLER

Description:

A thief sampler consists of two slotted concentric tubes, usually constructed of stainless steel or brass. The outer tube has a conical pointed tip which permits the sampler to penetrate the material being sampled. The inner tube is rotated to open and close the sampler. A thief is used to sample dry granules or powdered wastes whose particle diameter is less than one-third the width of the slots.

Procedures for use:

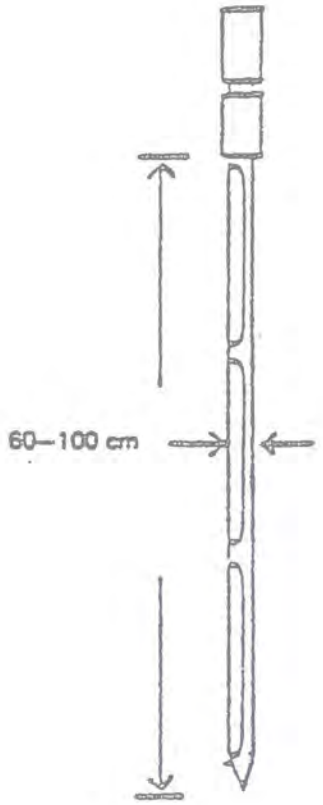
1. Clean sampler.

2. Insert closed thief into waste material. Rotate inner tube to open thief. Wiggle the unit to encourage material to flow into thief. Close thief and withdraw. Place sampler thief in a horizontal position with the slots facing upward. Remove inner tube from thief and transfer sample to a container.

Comments and Precautions:

1. Before sampling, ensure that the waste will not corrode the thief.

2. If necessary, the thief may be painted with a 2-part epoxy or other chemical resistant paint when the thief must be used on a corrosive waste.



Thief sampler

SAMPLING TRIER

Description:

A trier consists of a tube cut in half lengthwise with a sharpened tip that allows the sampler to cut into sticky solids and loosened soil. A trier samples moist or sticky solids with a particle diameter less than one-half the diameter of the trier.

Apparatus:

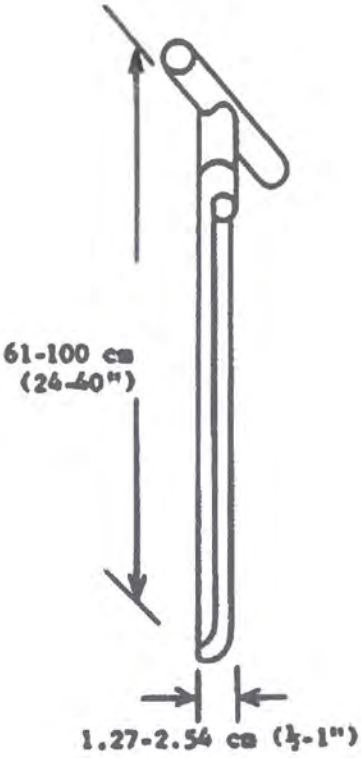
1 Triers 61 to 100 cm long and 1.27 to 2.54 cm in diameter are available at laboratory supply stores.

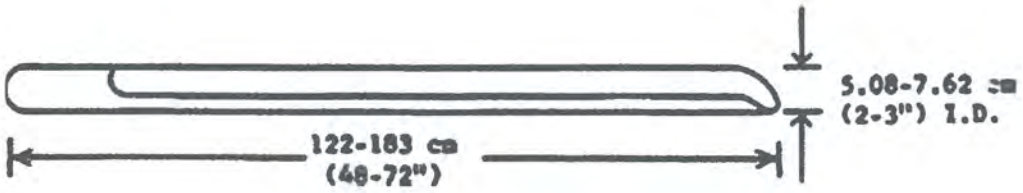
2. A large trier can be fabricated. A metal or polyvinyl chloride pipe, 1.52 m (5 ft) long x 3.2 cm (1.4 in.) I.D., with a 0.32-cm (1/8 in.) wall thickness, is needed. The pipe should be sawed lengthwise, about 60-40 split, to form a trough stretching from one end to 10 cm away from the other end. The edges of the slot and the tip of the pipe are sharpened to permit the sampler to cut into the waste material being sampled. The unsplit length of the pipe serves as the handle.

Procedures for use:

1. Clean trier.

2. Insert trier into waste material 0° to 45° from horizontal. Rotate trier to cut a core of the waste. Remove trier with concave side up and transfer sample to container


61-100 cm
(24-40")
1.27-2.54 cm (½-1")


5.08-7.62 cm
(2-3") I.D.
122-183 cm
(48-72")

AUGER

Scope and Application:

An auger consists of sharpened spiral blades attached to a hard metal central shaft. An auger samples hard or packed solid wastes or soil.

Apparatus:

Augers are available at hardware and laboratory supply stores

Procedure:

1. Clean sampler.

2. Bore a hole through the middle of an aluminum pie pan large enough to allow the blade of the auger to pass through. The pan will be used to catch the sample brought to the surface by the auger.

3. Place pan against the sampling point. Auger through the hole in the pan until the desired sampling depth is reached. Back off the auger and transfer the sample in the pan and adhering to the auger to a container. Spoon out the rest of the loosened sample with a sample trier.

Auger Sampler

SCOOP AND SHOVEL

Scope and Application:

Scoops are available at laboratory supply houses. Flat-nosed shovels are available at hardware stores. Scoops and shovels are used to sample granular or powdered material in bins, shallow containers and conveyor belts.

Procedures:

1. Clean sampler.

2. Obtain a full cross section of the waste material using a scoop or shovel that is large enough to contain the waste collected in one cross section sweep.

OPEN TUBE SAMPLER[1]

Description:

The open glass tube is the most versatile of hazardous liquid samplers because of its wide range of applications, relatively low cost, and ease of operation. It is a hollow glass or plastic tube, usually 4 feet long, with an internal diameter of 0.25 to 0.50 inches, depending on the viscosity of the sample. Open tubes made specifically for sampling (i.e., drum samplers) can be purchased. The only difference between these and laboratory glass tubes is that the former have a constricted orifice at the top in order to facilitate plugging the opening to maintain a vacuum in the tube.

Procedures for use:

1. Slowly lower the tube into the liquid to the desired depth. Slow insertion will prevent the mixture of container contents so that a more representative sample can be collected.

2. When the sampler is inserted to the desired depth, stopper the tube with a rubber stopper, thumb, or by creasing a piece of flexible tubing attached to the open end of the sample tube. This is done to establish a vacuum in the tube, thereby enabling withdrawal of the sample from the container.

3. Slowly withdraw the tube from the vessel and expel the sample into the sample container. Avoid handling the portion of the sampler that was placed into the liquid.

4. The tube can be disposed of by placing it back into the container that was sampled.

[1]Personal Protection and Safety Training Manual (Cincinnati, Ohio: U.S. Environmental Protection Agency, National Training and Operational Technology Center,1981), pp.3-1 and 3-4.

W A P - C

LAND DISPOSAL RESTRICTION SAMPLING

W A P - C

LAND DISPOSAL RESTRICTION SAMPLING

The procedures described herein represent the sampling and analytical procedures established for use at the facility for the treatment, storage and disposal of Land Disposal Restricted hazardous waste, see 40 CFR Part 268 and ch. NR 668, WAC.

1.0 Leachate

The decision to accept off-site generated leachate will be conducted as detailed in the pre-acceptance section of the Waste Analysis Plan. The generator will provide the necessary analytical data in conformance with the Waste Analysis Plan from the generator's facility.

2.0 Sampling

The Land Disposal Restrictions, 40 CFR 268 and ch. NR 668, WAC, have specified the use of "grab" sampling for most of the compliance demonstrations to the Land Disposal Restriction BDAT treatment standards. The current EPA guidance for RCRA sampling is SW-846, see 40 CFR 260.11 and s. NR 660.11, WAC, which specifies representative and composite sampling. SW-846 makes no reference to "grab" sampling. When industry or EPA guidance becomes available through the regulatory or SW-846 mechanism, "grab" sampling will be hereby incorporated into this document and conducted to demonstrate compliance with the Land Disposal Restrictions. Until such time, the sampling of LDR wastes will be conducted as previously identified in this document.

W A P - D

FIGURES AND TABLES

TABLE 3-1

SAMPLING METHODS AND EQUIPMENT

MATERIAL	METHOD	EQUIPMENT
Extremely viscous liquid	ASTM D140-70[a] or ASTM E300a	Tubingd, or thief
Crushed or powdered material	ASTM D346-78[a] or ASTM E300[a]	Tubingd, trier, scoop, or shovel
Soil or rock-like material	ASTM D420-69[a] or ASTM E300[a]	Tubingd, trier, auger, scoop or shovel
Soil-like material	ASTM D1452-80[a] or ASTM E300[a]	Tubingd, trier, auger, scoop or shovel
Fly ash-like material	ASTM D2234-82[a] or ASTM E300[a]	Tubingd, trier, auger, scoop or shovel
Containerized liquids	SW-846[b] or ASTM E300a	Coliwasa, tubing[d], bomb or weighted bottle

a. American Society for Testing Materials. "Annual Book of ASTM Standards," Philadelphia, PA, 1982 (or most recent edition).

b. U.S. Environmental Protection Agency. "Test Methods for Evaluating Solid Waste," SW-846, second edition, Office of Water and Waste Management, Washington, DC, July 1982 (or most recent edition).

c. Drawings and descriptions are presented in Appendix WAP-B.

d. Personal Protection and Safety Training Manual (Cincinnati, Ohio: U.S. Environmental Protection Agency, National Training and Operational Technology Center, 1981), pp. 3-1 and 3-4.

FIGURE 4-1

GENERATOR'S WASTESTREAM INFORMATION PROFILE

VEOLIA
ENVIRONMENTAL SERVICES

WASTESTREAM INFORMATION PROFILE

☐ Recertification

Disposal Code _____

Veolia ES LOCATION
☐ Invoice Address
☐ Manifest from – blank if direct

ADDRESS _____ CITY _____ ST _____

Veolia ES TSDF requested _____ Technology requested _____ Generator No._____ **Generator EPA ID No.** _____

1. **Generator Name**_____ **Generator State No.** _____ _____
Address _____ **State Wastestream No.**_____
City _____ **State** ___ **Country** USA **ZIP** _____
NAICS (SIC) Code _____ _____ _____ **Source** _____ **Origin** _____ **Form** _____ **System Type** _____

2. **Waste Name** _____ **Lab or Waste Area**_____
3. **Process Generating Waste** _____
4. **Shipping Name** _____
Hazard Class _____ **UN/NA No.**_____ **PG**___ **RQ amt**_____**lb**

RQ Desc:	1.	2.
DOT Desc:	1.	2.

5. **Waste Codes** _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

Wastewater ☐ **Non Wastewater** ☐ **Sub Category** _____

6. **Physical and chemical properties** *(check all that apply)*

pH
a ☐ < 2
b ☐ 2 - 5
c ☐ 5 - 9
d ☐ 9 - 12.5
e ☐ > 12.5
_____ exact

Specific Gravity
a ☐ < .8
b ☐ .8 - 1.0
c ☐ 1.0
d ☐ 1.0 - 1.2
e ☐ > 1.2
_____ exact

Flash Point (F)
a ☐ < 80
b ☐ 80 - 100
c ☐ 101 - 140
d ☐ 141 - 200
e ☐ > 200
f ☐ no flash _____exact

Solids
_____ % suspended
_____ % settleable
_____ % dissolved
Free Liquid Range ___to ___%

_____ % ash
_____ water solubility
_____ BTU/lb

Physical State
s ☐ solid
m ☐ semi-solid
l ☐ liquid
p ☐ pumpable semi-solid
f ☐ flowable powder
g ☐ gas
a ☐ aerosol
r ☐ pressurized liquid
d ☐ debris per 40 CFR 268.45
h ☐ sharps

Hazardous Characteristics
a ☐ air reactive
w ☐ water reactive
c ☐ cyanide reactive
f ☐ sulfide reactive
e ☐ explosive
o ☐ oxidizing acid
p ☐ peroxide former
r ☐ radioactive or NRC regulated
s ☐ shock sensitive
t ☐ temp sensitive
m ☐ polymerization/monomer
n ☐ OSHA carcinogen
I ☐ infectious
h ☐ inhalation hazard Zone: _

Odor
a none ☐
b mild ☐
c strong ☐
describe_____

Halogens
Br _____ % Bromine
Cl _____ % Chlorine
F _____ % Fluorine
I _____ % Iodine

Layers: a ☐ **multilayered:** b ☐ **bi-layered:** c ☐ **single phase:**

Viscosity by Layer:	Top Layer	Second Layer	Bottom Layer
	☐ high (syrup)	☐ high (syrup)	☐ high (syrup)
	☐ medium (oil)	☐ medium (oil)	☐ medium (oil)
	☐ low (water)	☐ low (water)	☐ low (water)
	☐ solid	☐ solid	☐ solid

Color
_____
_____
_____

oil y/n _ **HOC <1000 ppm** ☐ **or > 1000 ppm** ☐

WIP No. _____

7. **Chemical Composition** [M = Marine Pollutant, S - Severe Marine Pollutant, O = Ozone Depleting Substance, U = Underlying Hazardous Constituent, B = Benzene NESHAP, T = TRI Chemical, C = OSHA Carcinogen]

	Constituents	Range	Units		Constituents	Range	Units

Total Composition Must Equal or Exceed 100%

Other:

8. Is the wastestream being imported into the USA? Yes ☐ No ☐
9. Does the wastestream contain PCBs regulated by 40CFR? Yes ☐ No ☐
   PCB concentration _____ppm
10. Is the wastestream subject to the Marine Pollutant Regulations? Yes ☐ No ☐
11. Is the wastestream from an industry regulated under Benzene NESHAP? Yes ☐ No ☐
    If yes, is the wastestream subject to Notification and Control Requirements? Yes ☐ No ☐
    Benzene concentration _____ ppm
    Does it contain >= 10% water? Yes ☐ No ☐
    What is the TAB at your facility? _____ Mg/Yr
12. Is the wastestream subject to RCRA subpart CC controls? Yes ☐ No ☐
    Volatile organic concentration, if known _____ ppmw
    CC approved analytical method ☐ Generator Knowledge ☐
13. Is the wastestream from a CERCLA or state mandated cleanup? Yes ☐ No ☐

14. **Container Information** (*Identify UN container marking if known*)
    Packaging: Bulk Solid ☐ Type/Size: _____ **Bulk Liquid** ☐ Type/Size: _____ **Drum** ☐ Type/Size: _____
    Other _____
    Shipping Frequency: Units _____ Per Month ☐ Quarter ☐ Year ☐ One Time ☐ Other _____

15. **Additional Information**: _____

_____

_____

_____

Is analytical or an MSDS available that describes the waste? Yes ☐ No ☐ If yes, please attach.

GENERATOR CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize sampling of any waste shipment for purposes of recertification.

NAME (PRINT OR TYPE)	PHONE	DATE

SIGNATURE	TITLE

FACILITY NOTIFICATION

If approved for management, Veolia ES has all the necessary permits and licenses for the waste that has been characterized and identified by this profile.

TDF PROCESSING USE ONLY: PPE REQUIRED No _____ Yes _____ Describe _____

WIP No. _____

VEOLIA ENVIRONMENTAL SERVICES
WIP INSTRUCTIONS

Veolia ES requires completion of all sections of the Wastestream Information Profile (WIP). Sections not applicable to the wastestream must have N/A written in the space provided.

Documented WIP information is used to comply with TSDF Waste Analysis Plans, RCRA and DOT regulations, Emergency Planning and Community Right-to-Know Act (EPCRA), Pollution Prevention Act, Toxic Release Inventory Report and other regulatory and generator requirements.

MARINE POLLUTANT

- The wastestream is subject to the Marine Pollutant Regulations if:
  1. it is a bulk (>119 gallons) packaging with Marine Pollutant concentration ≥ 10% or Severe Marine Pollutant concentration ≥ 1%

     or
  2. it is non-bulk Marine Pollutant shipped by vessel (boat) in packages larger than 5 liters (liquid) or 5 kg (solid)

     or
  3. it is a non-bulk Severe Marine Pollutant, shipped by vessel (boat) in packages larger than 0.5 liters (liquid) or 0.5 kg (solid).

  Refer to the list of Marine Pollutants.

OZONE DEPLETING SUBSTANCE (ODS)

Refer to the list of Ozone Depleting Substances.

UNDERLYING HAZARDOUS CONSTITUENT (UHC)

Refer to the list of Underlying Hazardous Constituents (40 CFR 268.48)

BENZENE NESHAP

- The wastestream is subject to Benzene NESHAP notification and control requirements if it:
  1. contains > 10 ppm benzene, **and**
  2. is generated by a chemical manufacturing plant, petroleum refinery or coke by-product recovery plant, **and**
  3. the generator's Total Annual Benzene (TAB) is ≥ 10 Mg/yr

TRI CHEMICAL

- The wastestream is subject to Toxic Release Inventory Reporting if it contains a Section 313 Toxic Chemical and meets Qualifier requirements.

OSHA CARCINOGEN

- OSHA promulgated standards in 1974 to regulate the industrial use of 13 chemicals identified as occupational carcinogens. Exposures are to be controlled through the required use of engineering controls, work practices, and personal protective equipment, including respirators. See 29 CFR 1910.1003-1910.1016 for specific details.

RCRA SUB-PART CC CONTROLS

- Subpart CC Air Emission Control requirements apply to large quantity hazardous waste generators and to treatment, storage, and disposal facilities.
- Waste in containers greater than 0.1 cubic meters (i.e., 26.4 gallons) with greater than 500 ppm volatile organics are subject to this rule., unless otherwise exempted. Allowable controls include DOT approved containers, containers with an adequate cover and closure devices, and containers which operate with no detectable emissions (less than 500 ppm).

FIGURE 4-2

ANALYTICAL DECISION FLOW CHART

FOR PRE-ACCEPTANCE SAMPLE

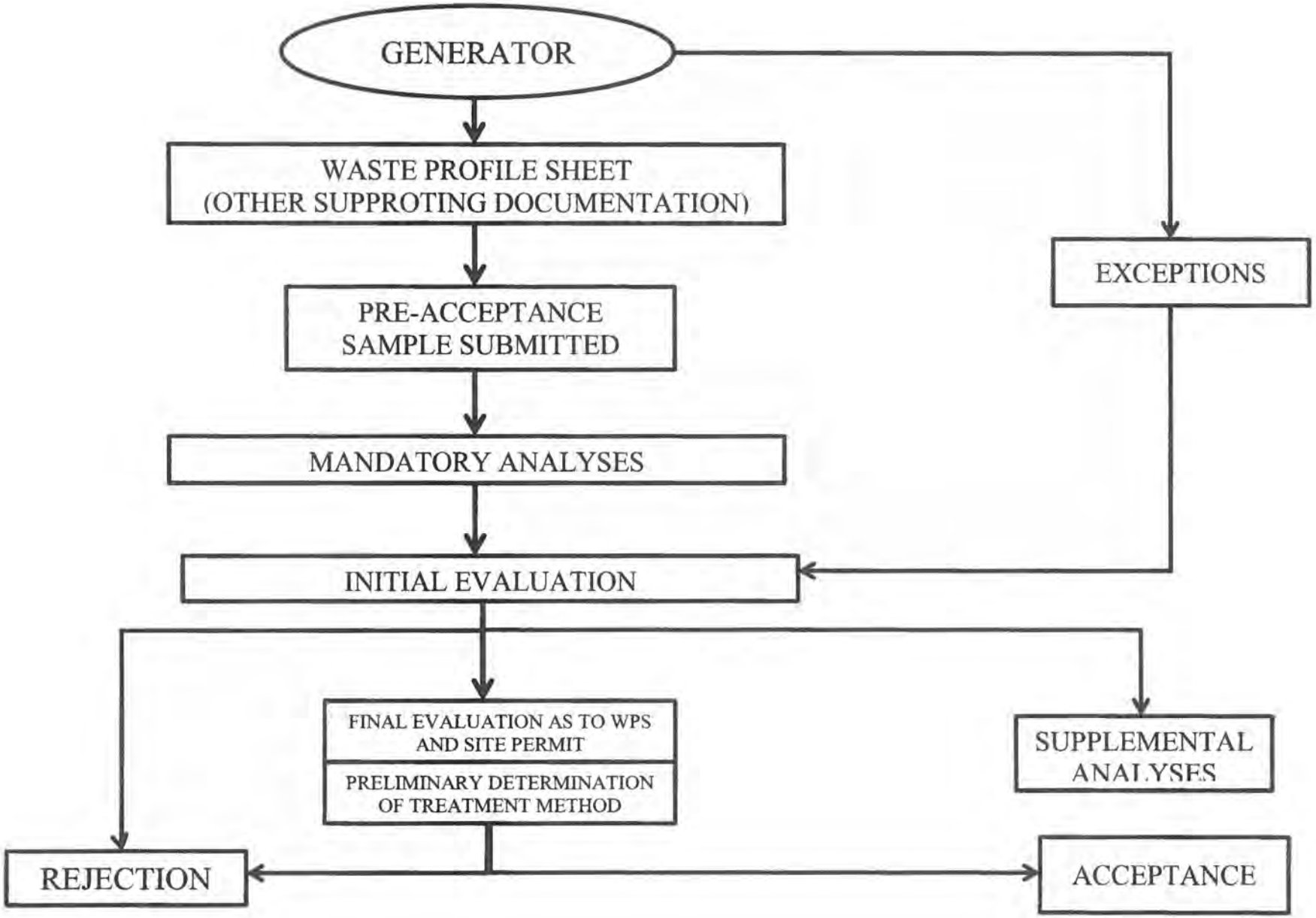


FIGURE 5-1
INCOMING LOAD IDENTIFICATION DECISION LOGIC DIAGRAM

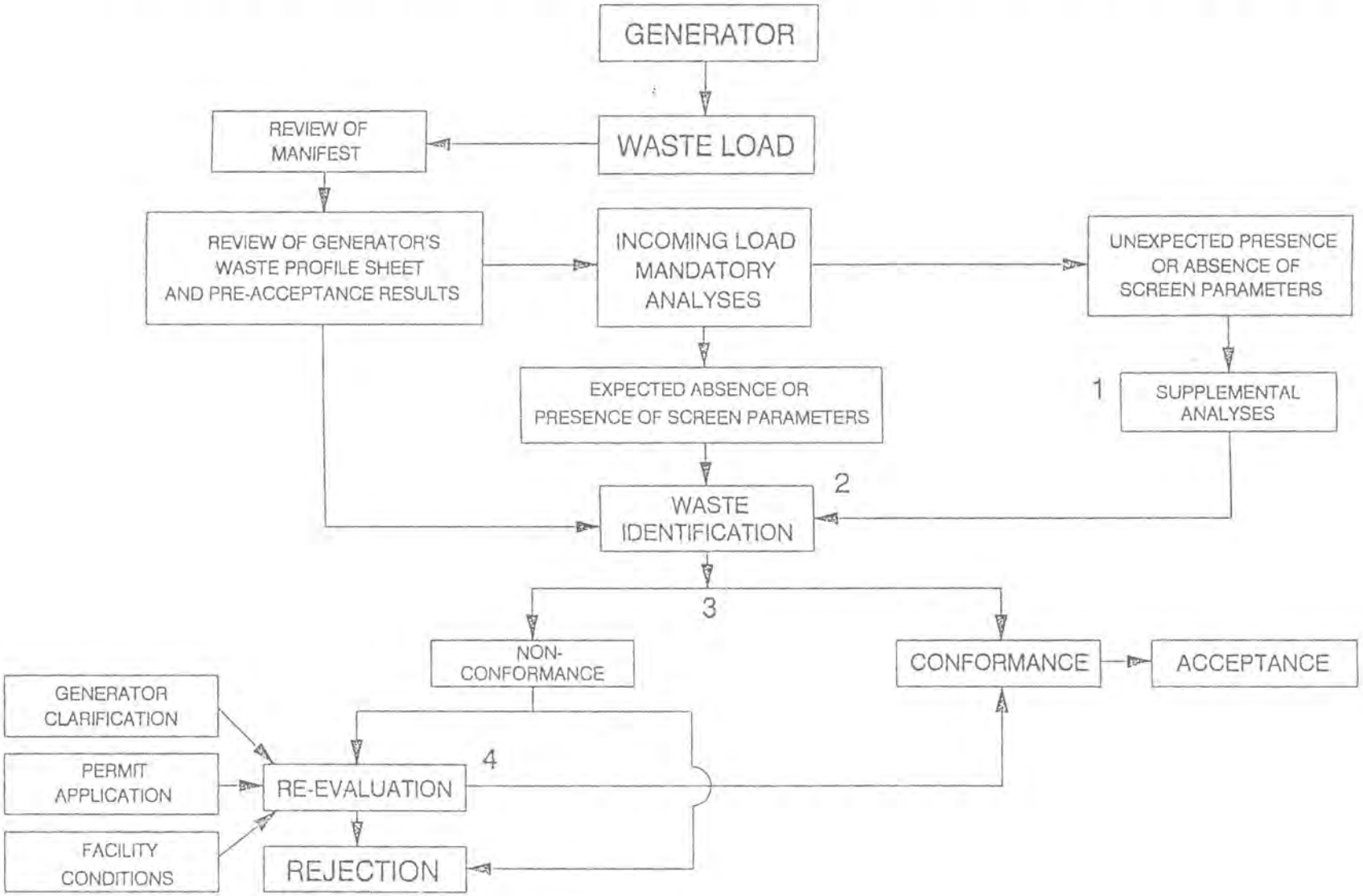
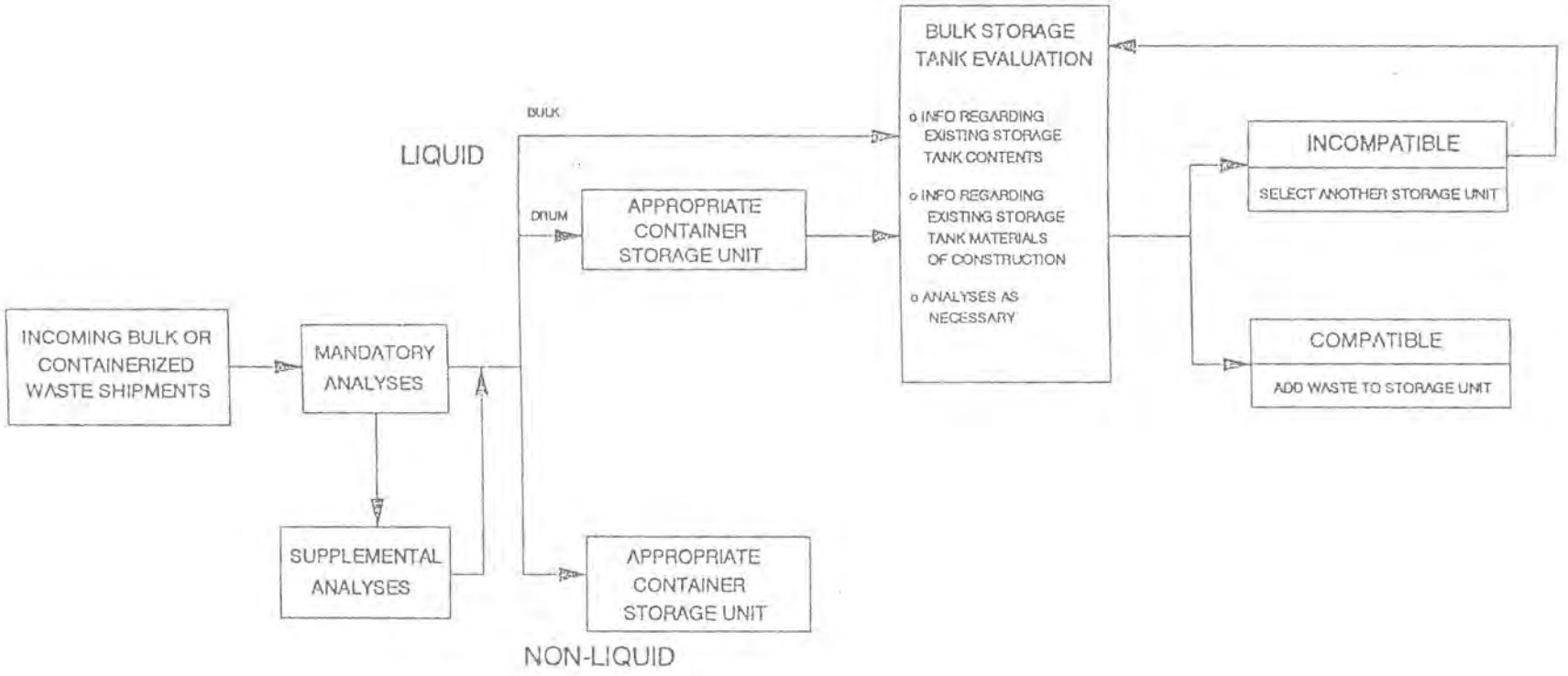


FIGURE 6-1
STORAGE



CWD

FIGURE 6-2
DECANTING

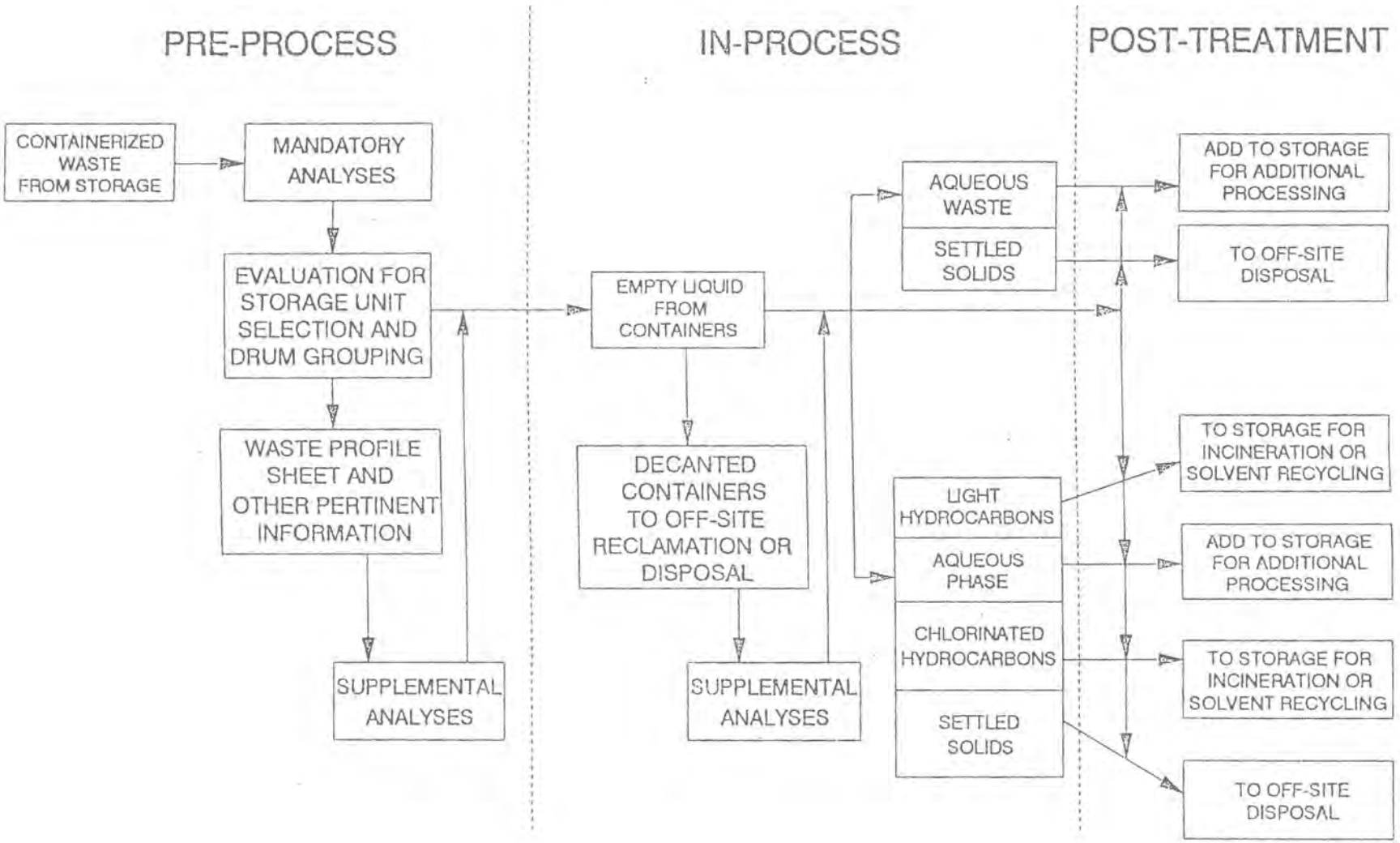
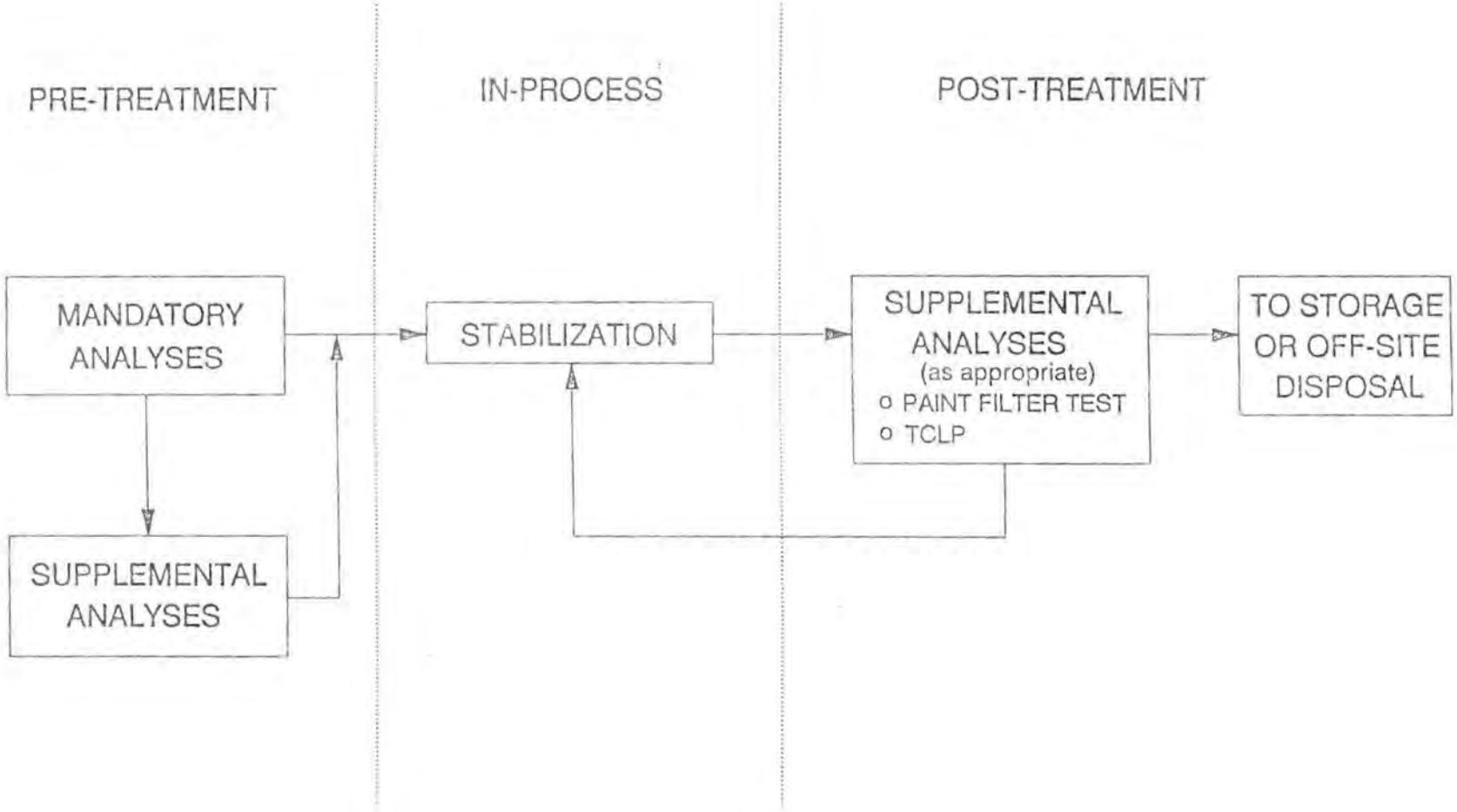


FIGURE 6-3
STABILIZATION



Section III

APPENDIX B

CURRENT HAZARDOUS WASTE LICENSES AND PERMITS

State of Wisconsin
Department of Natural Resources

recognizes

Wisconsin Certification under NR 149

of

Veolia Environmental Services, L.L.C.

Laboratory Id: **268201120**

as a laboratory licensed to perform environmental sample analysis in support of covered environmental programs (ch. NR149.02 Note) for the parameter(s) specified in the attached Scope of Accreditation.

August 31, 2013

Expiration Date

September 10, 2012

Issued on

Camille Turcotte, Chief
Environmental Science Services

Cathy Stepp, Secretary
Department of Natural Resources

This certificate does not guarantee validity of data generated, but indicates the methodology, equipment, quality control practices, records, and proficiency of the laboratory have been reviewed and found to satisfy the requirements of ch. NR 149, Wis. Adm. Code.

Scope of Accreditation

Veolia Environmental Services, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Laboratory Id: **268201120**
Expiration Date: **08/31/13**
Issued Date: **09/10/12**

Wisconsin Certification under NR 149
Matrix: Solid (Waste, Soil & Tissue)

Class: Metals
- Arsenic *by ICP*
- Barium *by ICP*
- Cadmium *by ICP*
- Chromium (Total) *by ICP*
- Copper *by ICP*
- Lead *by ICP*
- Mercury *by Hyd-CVAA*
- Nickel *by ICP*
- Selenium *by ICP*
- Silver *by ICP*
- Zinc *by ICP*

Class: PCBs as Aroclors
- ## PCB as AROCLORS (group) *by GC*

Class: Waste Characterization Assays
- Ignitability, Pensky-Martens Closed Cup *by Waste Assays*
- Waste Analysis, Other *by Waste Assays*

The laboratory named above is hereby licensed under ch. NR 149, Wis. Adm. Code for the parameters listed in this attachment.
* Analyte groups are defined and listed on the WI DNR Lab Certification website. See http://dnr.wi.gov/org/es/science/lc/ for details.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
SOLID WASTE FACILITY OPERATION LICENSE

AUTHORIZED CONTACT:

PAUL MCSHANE, GM
VEOLIA ES TECHNICAL SOLUTIONS LLC
W124 N9451 BOUNDARY RD
MENOMONEE FALLS, WI 53051-1603

LICENSE NO: 3002
TYPE OF FACILITY: Solid Waste Processing Facility

EFFECTIVE DATE: October 1, 2012
DATE OF EXPIRATION: September 30, 2013

LICENSEE: VEOLIA ES TECHNICAL SOLUTIONS LLC

NAME OF FACILITY: VEOLIA ES TECHNICAL SOLUTIONS LLC

LOCATION OF FACILITY: SE 1/4 OF NE 1/4 OF SECTION 1, T8, R20E
W124 N9451 BOUNDARY RD MENOMONEE FALLS
WAUKESHA COUNTY, STATE OF WISCONSIN

This license authorizes the licensee to operate the solid waste facility described above during the term hereof except as modified by the Department. This license is subject to and conditioned upon compliance with the provisions of chapter 289, Wis. Stats., and chapters NR 500-590, Wis. Adm. Code, any plan approval and modifications thereof, and any special order and modifications thereof issued by the Department. Any exemptions from the requirements of chapters NR 500-590, Wis. Adm. Code, issued for the facility are listed above.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE FACILITY LICENSE

AUTHORIZED CONTACT:

PAUL MCSHANE, GM
VEOLIA ES TECHNICAL SOLUTIONS LLC
W124 N9451 BOUNDARY RD
MENOMONEE FALLS, WI 53051-1603

LICENSE NO: 3135
TYPE OF FACILITY: Hazardous Waste Storage - Container
EFFECTIVE DATE: October 1, 2012
DATE OF EXPIRATION: September 30, 2013

U.S. EPA I.D. NUMBER: WID003967148

LICENSEE: VEOLIA ES TECHNICAL SOLUTIONS LLC

NAME OF FACILITY: VEOLIA ES TECHNICAL SOLUTIONS LLC

LOCATION OF FACILITY: SE 1/4 OF NE 1/4 OF SECTION 1, T8, R20E
W124 N9451 BOUNDARY RD MENOMONEE FALLS
WAUKESHA COUNTY, STATE OF WISCONSIN

THIS LICENSE IS SUBJECT TO AND CONDITIONED UPON COMPLIANCE WITH THE LICENSEE'S FEASIBILITY DETERMINATION AND PLAN OF OPERATION APPROVAL AND ALL SUBSEQUENT PLAN APPROVAL MODIFICATIONS.

WASTE TYPES ARE LIMITED TO THOSE LISTED ON THE PART-A APPLICATON.

This license authorizes the licensee to operate the hazardous waste facility described above during the term hereof except as modified by the Department. This license is subject to and conditioned upon compliance with chapter 291, Wis. Stats., and chapters NR 660-679, Wis. Adm. Code (hazardous waste), any plan approval and modifications thereof, and any special order and modifications thereof issued by the Department. Any exemptions from the requirements of chapters NR 660-679, Wis. Adm. Code, issued for the facility are listed above and on attached documents.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE FACILITY LICENSE

AUTHORIZED CONTACT:

PAUL MCSHANE, GM
VEOLIA ES TECHNICAL SOLUTIONS LLC
W124 N9451 BOUNDARY RD
MENOMONEE FALLS, WI 53051-1603

LICENSE NO: 6012
TYPE OF FACILITY: Hazardous Waste Storage - Tank
EFFECTIVE DATE: October 1, 2012
DATE OF EXPIRATION: September 30, 2013

U.S. EPA I.D. NUMBER: WID003967148

LICENSEE: VEOLIA ES TECHNICAL SOLUTIONS LLC

NAME OF FACILITY: VEOLIA ES TECHNICAL SOLUTIONS LLC

LOCATION OF FACILITY: SE 1/4 OF NE 1/4 OF SECTION 1, T8, R20E
W124 N9451 BOUNDARY RD MENOMONEE FALLS
WAUKESHA COUNTY, STATE OF WISCONSIN

THIS LICENSE IS SUBJECT TO AND CONDITIONED UPON COMPLIANCE WITH THE LICENSEE'S FEASIBILITY DETERMINATION AND PLAN OF OPERATION APPROVAL AND ALL SUBSEQUENT PLAN APPROVAL MODIFICATIONS.

WASTE TYPES ARE LIMITED TO THOSE LISTED ON THE PART-A APPLICATON.

This license authorizes the licensee to operate the hazardous waste facility described above during the term hereof except as modified by the Department. This license is subject to and conditioned upon compliance with chapter 291, Wis. Stats., and chapters NR 660-679, Wis. Adm. Code (hazardous waste), any plan approval and modifications thereof, and any special order and modifications thereof issued by the Department. Any exemptions from the requirements of chapters NR 660-679, Wis. Adm. Code, issued for the facility are listed above and on attached documents.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
HAZARDOUS WASTE FACILITY LICENSE

AUTHORIZED CONTACT:

PAUL MCSHANE, MG
VEOLIA ES TECHNICAL SOLUTIONS LLC
W124 N9451 BOUNDARY RD
MENOMONEE FALLS, WI 53051-1603

LICENSE NO: 6013
TYPE OF FACILITY: Hazardous Waste Treatment - Miscellaneous
EFFECTIVE DATE: October 1, 2012
DATE OF EXPIRATION: September 30, 2013

U.S. EPA I.D. NUMBER: WID003967148

LICENSEE: VEOLIA ES TECHNICAL SOLUTIONS LLC

NAME OF FACILITY: VEOLIA ES TECHNICAL SOLUTIONS LLC

LOCATION OF FACILITY: SE 1/4 OF NE 1/4 OF SECTION 1, T8, R20E
W124 N9451 BOUNDARY RD MENOMONEE FALLS
WAUKESHA COUNTY, STATE OF WISCONSIN

THIS LICENSE IS SUBJECT TO AND CONDITIONED UPON COMPLIANCE WITH THE LICENSEE'S FEASIBILITY DETERMINATION AND PLAN OF OPERATION APPROVAL AND ALL SUBSEQUENT PLAN APPROVAL MODIFICATIONS.

WASTE TYPES ARE LIMITED TO THOSE LISTED ON THE PART-AAPPLICATON.

This license authorizes the licensee to operate the hazardous waste facility described above during the term hereof except as modified by the Department. This license is subject to and conditioned upon compliance with chapter 291, Wis. Stats., and chapters NR 660-679, Wis. Adm. Code (hazardous waste), any plan approval and modifications thereof, and any special order and modifications thereof issued by the Department. Any exemptions from the requirements of chapters NR 660-679, Wis. Adm. Code, issued for the facility are listed above and on attached documents.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT

Facility Name and Location: Onyx Environmental Services
W124 N9451 Boundary Road
Menomonee Falls, Wisconsin 53051
SE 1/4 of NE 1/4, Section 1, Township 08 North, Range 20 East
Village of Menomonee Falls, Waukesha County

Owner(s): Onyx Environmental Services
3225 Aviation Avenue 4th Floor
Miami, Florida 33133

Operator(s): Same as Facility Name and Location

U.S. EPA Identification Number: WID 003 967 148

Effective Date: SEP 03 2003

Expiration Date: **June 30, 2013**

Authorized Activities:

The United States Environmental Protection Agency (U.S. EPA) hereby issues a Resource Conservation and Recovery Act permit (hereinafter referred to as the "permit") to Onyx Environmental Services (hereinafter referred to as the "Permittee" or addressed in the second person as "you") in connection with the hazardous waste storage and treatment activities at W124 N9451 Boundary Road, Menomonee Falls, Wisconsin.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as RCRA) and U.S. EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Specifically, this permit addresses (1) certain restrictions and prohibitions on land disposal of hazardous wastes in accordance with 40 CFR Part 268; (2) other Federal RCRA regulations for which the state has not yet been authorized; and (3) air emissions standards for tanks, and containers in accordance with 40 CFR § 264.1080 *et seq.* (40 CFR Part 264, Subpart CC).

Section III

APPENDIX C

BULK SAMPLING PROTOCOL

Veolia Environmental Services, LLC
Sampling Protocol #8
Sampling Bulk Solids

1. Purpose

1.1 To provide procedures for the collection of samples of solid waste received in bulk loads.

2. Scope

2.1 This protocol describes typical equipment and procedures for sampling solid wastes contained in bulk containers.

3. Responsibilities

3.1 Facility Manager

3.1.1 Provide proper sampling equipment.
3.1.2 Provide safe facilities for sampling of bulk solids.

3.2 Sampling Personnel

3.2.1 Maintain all equipment and tools used during sampling.
3.2.2 Notify immediate supervisor of the need to replace equipment.
3.2.3 Notify management of any discrepancies.
3.2.4 Perform sampling in accordance with this protocol.

3.3 Sampling Supervisor

3.3.1 Assures that sampling personnel are trained.
3.3.2 Acquires sampling equipment.
3.3.3 Oversees conformance to written procedures.

3.4 Facility Technical Management

3.4.1 Develop a site specific document when this protocol is insufficient to cover all aspects of the sampling event.
3.4.2 Determine the maximum degree of compositing.

4. Definitions

4.1 Load – The contents of a dump truck, lugger box, roll off box, sludge box, sludge box, drop box, ram truck, bin, tub, or other truck, trailer or rail car units designed to transport bulk solid wastes to treatment, storage and disposal facilities.

4.2 Paperwork – Site documentation which may include manifests, profile sheets, MSDSs, site forms, etc.

4.3 Composite Sample – A sample made by combining individual sample portions.

5. Equipment

5.1 Choice of Equipment

The following table summarizes selection criteria for equipment by the material to be sampled.

Equipment	ASTM Standard	Cohesive Solid	Sheet, Cloth, or Chunk Material	Dry Flowable Solids	Moist Flowable Solids	Sticky or Elastic Material
Scoop	D5633	X	X	X	X	X
Auger	D4700	X	-	-	-	-
Trier	D5451	X	-	-	X	-
Thin-walled tube	D4700	X	-	-	X	-
Hammer & chisel, scissors, tongs		N	X	-	-	X
Concentric tube thief	E300	-	-	X	-	-

X = Equipment may be used with this type of waste

N = Not equipment of choice, but may be used

- = Equipment is unsuitable for this type of waste

5.2 Materials of Construction

5.2.1 Each of the sampling devices listed above should be constructed of materials which are inert to the wastes which may be encountered at a specific site.

5.2.2 These devices will usually be made of steel, aluminum or plastic.

5.3 Sampling Equipment

5.3.1 Scoop with extension handle or shovel
5.3.2 Concentric tube thief
5.3.3 Auger
5.3.4 Trier
5.3.5 Scissors, tongs, hammer and chisel

5.3.6 Thin walled tube
5.3.7 Spatula or reamer

5.4 Sampling Supplies

5.4.1 Clothe or paper wipes
5.4.2 Sample containers with lids and liners as specified
5.4.3 Indelible ink marker
5.4.4 Sample labels
5.4.5 Paperwork and site forms
5.4.6 Sample carrier

6. Facilities

6.1 A catwalk truck sampling platform or similar apparatus is required to allow sampling personnel to safely access the truck bed with a minimum of difficulty.
6.2 Refer to Sampling Protocol #5.

7. Sample Location and Sample Depth

7.1 Sample portions are collected from a minimum of three location from the load (e.g., front, middle, back).

7.2 Sample depth: Most samples will be near surface samples because of limited access to the load (safety) and limitations of the sampling equipment.

7.3 Consult the site permit for any sample depth requirements.

8. Procedures

8.1 Review paperwork.
8.2 Gather the appropriate sampling equipment.
8.3 Inspect the truck to ensure that the tarp or cover is removed from the entire load.
8.4 Inspect the load to confirm consistency with the paperwork and identify any discrepancies (free liquid, etc.)
8.5 Collect a sample from the load using sampling equipment appropriate for the waste. Sampling personnel should have firm footing before using any of the sampling equipment described below.

8.5.1 Trier – Triers are limited to sampling material with a physical consistency such as a soil or similar fine-grained cohesive material. See Figure 1. The trier is pushed vertically downward into the material and rotated one or two times to cut a core. The trier is pulled out of the hole and the core is removed with a spatula or reamer. If the sample core does not satisfy the minimum sample volume, collect another core.
8.5.2 Scoop or Shovel – The scoop is used for collecting equal portions at random spots at or near the surface of the waste. Scoops must be of a size and shape and shape suitable for the size and quantity of the particles to be sampled.

8.5.3 For waste containing fragments or small chunks, the scoop may be the only device capable of retaining a sample. Scraper inside the surface layer of the material to the approximate sampling depth. This may be done with a scoop or a shovel, etc. Collect a scoop full and place it in the sample container. The same scoop may be used to obtain sufficient sample volume. See Figure 2 for an example of a scoop.

8.5.4 Auger – Screw or turn the auger into the material to the desired depth, then pull straight out. Material from the deepest interval is retained on the auger flights. The sample is collected from this extracted portion and transferred to the sample container with a spatula or other suitable device. Augers can be used to sample hard or cohesive solid wastes or soil Augers, like triers, can be equipped with a crossbar facilitating the penetration of the waste.

8.5.5 Concentric Tube Thief – Concentric tube thiefs have a limited application for sampling bulk solid material. (e.g., material the size and shape of pellets or pea gravel, etc.)

8.5.5.1 Materials that are not free flowing such as those that are hard packed, moist or finely powdered will not enter this type of sampler under normal field conditions.

8.5.5.2 Sampling of materials containing granules or particles exceeding the slot width should not be attempted because bridging may occur. See Figure 4.

8.5.5.3 Insert the thief as far as possible into the waste.

8.5.5.4 Rotate the concentric tubes to the open position, thereby allowing the sample to flow into the inner tube.

8.5.5.5 Wiggle or shake the thief several times and rotate the tubes to the closed position.

8.5.5.6 Withdraw the thief.

8.5.5.7 Place the device over a sample collection sheet and release the sample by rotating the tubes to the open position.

8.5.5.8 Transfer the sample from the collection sheet to the sample container.

8.5.6 Scissors, Tongs, Hammer and Chisel – These tools are used as necessary to collect sample material. A hammer and chisel are found useful where particle size reduction is necessary. Scissors can be used in combination with tongs to collect samples of material that are cloth like, elastic, paper like, etc.

8.5.7 Thin-walled Tube Sampler – Thin walled tubes can be used to collect samples of material that is moist or cohesive. Push the tube as far as possible into the material and rotate to shear the core. Withdraw the tube. The sample is extruded by forcing a rod through the tube. The sample is then transferred to a sample container. See Figure 5.

8.6 Close the sample container. Wipe the outer surface of the sample container if unnecessary. Dispose of the wiper cloth properly.

8.7 Complete and attach the label to the side of the sample container after the sample has been collected.

8.8 Transport the sample to the laboratory for log in.

8.9 Decontaminate reusable sampling equipment according to Sampling Protocol #5.

9. Compositing

9.1 Sampling portions can only be combined from one load.

9.2 Sample portions must be approximately equal in volume.

10. Corrective Action

10.1 Resample the waste stream when needed.

11. References

11.1 ASTM D4700: Standard Guide for Soil Sampling from the Vadose Zone

11.2 ASTM D5451: Standard Practice for Sampling using a Trier Sampler

11.3 SW-846, Test Method for Evaluating Solid Wastes, Physical/Chemical Methods, Chapter 9.

Section III

APPENDIX D

LAB INTERNAL ASSESSMENT

SCOPE:

To provide a mechanism for identifying and correcting issues in a timely manner and provide a basis for periodic management summaries on the quality of its laboratory.

PURPOSE:

This procedure specifies the content required for a comprehensive laboratory internal assessment (self audit) program. At a minimum, the internal assessment must include elements of review for: training, data defensibility, productivity, method adherence, instrument maintenance, calibrations, QA/QC, housekeeping, safety, and WAP compliance.

PROCEDURES:

1 Development of Self Assessment Program

1.1 A specific format must be developed. The recommended format is a set of modular checklists which include narrative sections to allow full explanation of findings and documentation of the follow up to corrective actions.

1.2 The assessment must be comprehensive. All of the following areas must be included.

1.2.1 Log Books
1.2.2 Calculations
1.2.3 Control Charts
1.2.4 QC (e.g. MDLs, blanks, LCS, duplicates, spikes, PE results, RM results, etc.)
1.2.5 Methods and Sampling
1.2.6 Safety
1.2.7 Training
1.2.8 Documentation
1.2.9 Standards
1.2.10 Sample Management
1.2.11 Maintenance and Calibration
1.2.12 Facilities
1.2.13 Instrumentation
1.2.14 Inventory
1.2.15 WAP/Permit Requirements
1.2.16 Corrective Action Implementations

1.3 The assessment must be performed at a frequency which insures that any corrective action is timely.

1.3.1 Yearly Coverage

1.3.1.1 Training Items:

1.3.1.1.1 New laboratory employee orientation
1.3.1.1.2 Sampling activities
1.3.1.1.3 Analytical methods
1.3.1.1.4 Certification (re-certification) on SDPs/SSPs for laboratory functions

1.3.1.2 Organization

1.3.1.2.1 Training files
1.3.1.2.2 Position descriptions
1.3.1.2.3 Curriculum Vitae/Resumes/Educational Summary
1.3.1.2.4 Organizational chart
1.3.1.2.5 Checks on traceability system
1.3.1.2.6 Checks on Sample Management Practices
1.3.1.2.7 Checks for Methods Manual

1.3.2 Semi-annual Coverage

1.3.2.1 PE Coverage
1.3.2.2 PE Responses to Outliers

1.3.3 Quarterly Coverage

1.3.3.1 Instrumentation (Instrument List) Inventory
1.3.3.2 Documentation Practices (Logbook formats)
1.3.3.3 WAP/Permits Revision Status
1.3.3.4 Standards: Check expiration dates and supply
1.3.3.5 Sample Tracking: Clear custody trail
1.3.3.6 Instrumentation: Update list and evaluate future needs
1.3.3.7 Inventory: Update chemical and supply inventory
1.3.3.8 Documentation: Review defensibility data
1.3.3.9 WAP/Permits: Changes in any permit or WAP that effect lab operations.
1.3.3.10 Quality Control:

1.3.3.10.1 MDLs Current
1.3.3.10.2 Reference Laboratory Samples (Parallels) submitted if required

1.3.3.10.3 Blind duplicates (when required); coverage complete
1.3.3.10.4 QC report reviewed and sent

1.3.4 Monthly Coverage

1.3.4.1 Methods/Sampling

1.3.4.1.1 Certification Training

1.3.4.1.1.1 New hires have job descriptions
1.3.4.1.1.2 New hires have provided CVs, Educational Summaries, etc.
1.3.4.1.1.3 New hires have begun the process of Site/Lab orientation
1.3.4.1.1.4 Method training is underway or completed
1.3.4.1.1.5 SDP and QC training is underway or completed

1.3.4.1.2 Re-certification Training

1.3.4.1.2.1 Review training schedule
1.3.4.1.2.2 Schedule training required for the next month
1.3.4.1.2.3 Check status of previous month's training schedule
1.3.4.1.2.4 Review corrective actions with retraining cited

1.3.4.2 Productivity

1.3.4.2.1 Evaluate future goals
1.3.4.2.2 Upcoming projects
1.3.4.2.3 Production problems
1.3.4.2.4 Assess instrument, reagents/standards needs for ongoing and/or anticipated work load
1.3.4.2.5 Update inventory system, training schedule, etc. to reflect status changes in work load

1.3.4.3 Calibration/Maintenance

1.3.4.3.1 Review instrument service logs
1.3.4.3.2 Service contracts and PM schedules
1.3.4.3.3 Identify instrument calibration problems

1.3.4.4 Safety

1.3.4.4.1 CHP training completion
1.3.4.4.2 Resolution of safety issues

1.3.5 Weekly Coverage

1.3.5.1 Data

1.3.5.1.1 Data completeness
1.3.5.1.2 Correct data entry practices
1.3.5.1.3 Corrective actions are explained and properly entered
1.3.5.1.4 Sign and date all log book pages reviewed

1.3.5.2 Calculations

1.3.5.2.1 Check Sample Result (10%)
1.3.5.2.2 Check QC data

1.3.5.2.2.1 LCS Calculation
1.3.5.2.2.2 RPD Calculation
1.3.5.2.2.3 %R Calculation

1.3.5.3 Facility: Check for cleanliness, neatness and functionality

1.3.5.3.1 Ceilings
1.3.5.3.2 Floors
1.3.5.3.3 Counters
1.3.5.3.4 Hoods

2 Implementation of the Self Assessment Program – At the frequency specified above in 1.3

2.1 Schedule – at the frequency specified in section 1.3
2.2 Assessment – findings must be documented. The documentation will include the following.

2.2.1 Date of audit
2.2.2 Check ok/not ok if list is used
2.2.3 Description of findings
2.2.4 Corrective action required
2.2.5 Due date for corrective action
2.2.6 Signature of auditor (if delegated)
2.2.7 Signature of Lab Manager
2.2.8 Summaries of self-audit are formalized to site management on a quarterly basis.

2.3 Corrective Action – specific action and or instruction must be given as outlined in SOP 11.

2.3.1 Follow up to corrective actions
2.3.2 The effectiveness of the corrective action must be evaluated

2.3.3 If it is found to be ineffective then an alternate corrective action need to be used.
2.3.4 Training – if discrepancies appear to be more than simple oversight, the staff person(s) will be notified of the incorrect practice and will be trained as to the accepted practice.

3 Reports to Management

3.1 On a quarterly basis, a summary of the current self assessment will be provided to management.
3.1.1 Outline issues identified, by category
3.1.2 Provide the corrective action plan
3.1.3 Summarize resolution/status of corrective actions from previous summary(s)

3.2 On an annual basis, a summary of the overall assessment of the laboratory status will be provided to management.

3.2.1 Summary of systematic issues identified, resolved
3.2.2 Effectiveness of corrective action plans
3.2.3 Resolution rate of corrective actions
3.2.4 Summary of PE Performance for the year
3.2.5 Summary of training status
3.2.6 Summary of QC data for the year
3.2.7 Recommendations for improvements to facilities, equipment and/or personnel

RESPONSIBILITIES:

1 The Laboratory Manager is responsible for developing and implementing the laboratory self audit program.
2 The Laboratory Manager may delegate various self-audit activities to subordinates but remains the responsible party.
3 The Site Manager or Technical Manager is responsible for reviewing the quarterly and annual assessment summaries and ensuring that effective corrective actions have been implemented.

DEFINITIONS:

Self assessment is a three step process:

1 Formal review of the state of the laboratory
2 Corrective action for deficiencies discovered
3 Training (or refresher training or counseling) to prevent reoccurrence.

CORRECTIVE ACTION:

1 Lab Manager must alter the above items and/or frequency to a higher level whenever it is demonstrated that persistent issues are identified in a particular area.
2 Lab Manager may alter the above items and/or frequency to a lesser level whenever it has been demonstrated that no persistent issues are identified in a particular area.

SECTION IV
TYPES OF WASTE AND WASTE MANAGEMENT FACILITY

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

4.0 TYPES OF WASTE AND WASTE MANAGEMENT FACILITY

4.1 Operational Concept

Veolia – Menomonee Falls has prepared and submitted this Feasibility and Plan of Operation Report (FPOR), to Wisconsin Department of Natural Resources (WDNR), for review and approval pursuant to a Call-in letter from Franklin Schultz, WDNR-Southeast Region, Waste Program Manager, dated 12/22/2011.

This FPOR is jointly submitted to USEPA, Region V, for review and approval, as needed, to implement concurrent issuance of a federal RCRA permit for sections of RCRA not authorized in the State of Wisconsin.

The Veolia – Menomonee Falls facility will have an unlimited operating life due both to the controlled nature of facility operations and associated facility maintenance program. All facility operations including waste storage, waste treatment, and waste transportation (including on-site waste transfer related activities) are non destructive to facility equipment. Equipment specification and materials of construction are selected based upon compatibility with waste materials managed at the facility. Conventional maintenance programs will ensure proper equipment operation and function at all times.

Certain waste materials managed at Veolia – Menomonee Falls remain at all times within activities only associated with transportation. These waste materials will be present at the facility for a maximum of 10 days, and, therefore, are considered as material "in transfer" and are not formally received at Veolia – Menomonee Falls.

No waste disposal operations are now, authorized, or are planned to be authorized in the future at Veolia – Menomonee Falls. Therefore, the finite life of a disposal unit is not relevant when determining the facility operating life.

However, to address regulatory requirements regarding facility closure, this Feasibility and Plan of Operation Report does contain a facility specific Closure Plan. Implementation of the entire facility Closure Plan, or selected section(s) of the Closure Plan, as appropriate, could be initiated by Veolia – Menomonee Falls to address any or all of the following circumstances: Management decision to close the entire facility, or, Management decision to close selected regulated units at the facility.

Financial assurance is in place for all units described by the Feasibility and Plan of Operation Report.

Veolia – Menomonee Falls operates the following waste storage and treatment units with capacities as indicated in the table below:

STORAGE AND TREATMENT CAPACITY SUMMARY

Container Storage:

1200 Drums @ 55 gallons each……66,000 gallons

20 drums @ 55 gallons each…….....1,100 gallons

48 Roll-Off Boxes @ 4,039 gallons each or containers, total storage volume...193,872 gallons

4 Roll-Off Boxes @ 4,039 gallons each or containers, total storage volume.....16,156 gallons

Total……...……...255,128 gallons

Solid Tank Storage (Stabilization Process Unit)

1 Tank @ 40.0 cubic yards……..40.0 cubic yards

1 tank @ 54.5 cubic yards……54.5 cubic yards

Total……94.5 cubic yards

Liquid Semi-Tanker Storage:

3 @ 6,000 gallons……...18,000 gallons

Waste Treatment via Stabilization Process…….. 109,500 tons/year

Waste Treatment via Repack/Bulking/Decant Process……. 16,000 gallons/day

The 1200 Drum Container storage unit, Southeast Container Storage Unit, Depack/Repack/Decant Process Unit, and Stabilization Unit are all constructed and operating as outlined in previous FPOR approved by WDNR.

4.2 Type and Characteristics of Waste

In general, Veolia – Menomonee Falls manages three broad groups of waste (Recoverable and Non-Recoverable Organic-Based Wastes; Inorganic Wastes; and Reactive Waste). These groups are subdivided into 15 sub-groups. Table 4-1 lists these groups, sub-groups and estimated annual quantities of each expected to be managed at the facility. Waste quantities entered in Table 4-1 provide, in part, the basis for the facility Part A permit document. Entries in Table 4-1 do not address waste intended to be stored prior to stabilization or treated via the Stabilization Process.

Table 4-1 also addresses waste material intended to be treated via the Waste Stabilization Process. Selected sub-group identifications that typically will require treatment prior to land disposal have been entered into Table 4-1 as estimated annual quantities to be managed, including associated on-site storage.

Table 4-2 lists examples of EPA waste codes that may be associated with each group of waste. These listings are provided as general guidance and are not all inclusive of EPA waste codes that may be associated with any particular group. Veolia – Menomonee Falls

recognizes that waste code assignment does not necessarily provide description of waste characteristics. Application of the "derived from" concept to certain wastes, such as incineration treatment residuals, is an example of a waste that may have many EPA waste codes assigned, but may not exhibit toxic or other characteristics of the original waste.

Tables 4-3 through 4-5 list, in three groups, the types of wastes that Veolia – Menomonee Falls expects to receive at the facility. For each waste group, the principal waste characteristic and potential related EPA Hazardous Waste Number is listed. Additionally, numerous examples of wastes within each waste group and comments about other chemical characteristics of the waste type are included in these tables. The examples listed reflect actual wastes that have been received at various Veolia facilities and that may be received at this facility in the future. If EPA introduces new hazardous waste codes for wastes that can be safely and effectively managed at the Veolia – Menomonee Falls facility, Veolia may in the future submit an application for permit/license modifications to include new waste codes authorized to be managed at the facility.

Veolia – Menomonee Falls believes that the classification system used in this section enables a reasonable and useful description of waste characteristics. Experience at other Veolia facilities reveals that thousands of types of hazardous wastes likely will be received. For example, many ignitable wastes (D001) will contain one or more of the heavy metals or other constituents in sufficient quantities to cause them also to fail the Toxicity Characteristic Leaching Procedure (TCLP) regulatory levels (Table 4-6) (D004-D043). Veolia – Menomonee Falls will test for TCLP according to 40 CFR Part 268, Appendix 1, to determine the mobility of both organic and inorganic contaminants present. Veolia – Menomonee Falls will receive the waste streams in accordance with the approved Waste Analysis Plan.

Veolia– Menomonee Falls has employed the grouping system reflected in Table 4-1 to list examples of potential waste streams and hazardous characteristics reflected in Tables 4-3

through 4-5.

Notwithstanding this classification system, the facility's operating records will fully document received wastes as they are designated by the generator's Waste Material Profile/Waste Information Profile, and on the manifest, and will also reflect additional information revealed by application of the Waste Analysis Plan. Thus, for example, if an ignitable waste also has a toxicity characteristic by virtue of its arsenic concentration, it will be listed in the operating record as D001/D004 waste. Also, the classification system in this section will not be employed to restrict proper and complete application of the Waste Analysis Plan. For example, an oil bearing waste will be analyzed for PCB content and for halogenated organics content in order to (1.) preclude introduction of PCB wastes into the supplemental fuel or (off-site) solvent recovery; or (2) ensure that the halogen content of the recovered material (solvent, or supplemental fuel) will be within prescribed limits.

Wastes that may require on-site storage pending ultimate treatment or disposal include:

- Recoverable and Non-Recoverable organic wastes may be treated by decanting the liquid fraction, if any, from containers. The liquids will be accumulated and stored in 55-gallon drums. The liquids from the 55-gallon containers will then be decanted into tankers for shipment off-site in bulk for reclamation and treatment. Residual solids will be removed from the original containers and consolidated into new containers for off-site management.

- Inorganic wastes, defined as those wastes containing less than ten percent (10%) total organics and less than one percent (1%) halogenated organics, may be treated on-site via stabilization or transferred off-site for treatment and disposal.

- Reactive wastes may also be treated on-site via stabilization or transferred off-site for treatment and disposal.

Thus, fundamental waste characteristics will determine how each waste can and should be best managed. In addition, the facility may receive various discarded commercial chemical products (those listed in 40 CFR 261.33 and Table 4-7). When these wastes are received, they will be managed based upon their fundamental characteristics as outlined above. The facility will not accept radioactive wastes, explosive wastes, or other wastes that cannot be properly or safely managed at the facility, as determined by the General Manager or designee. Table 4-8 lists examples of wastes that are not and will not be accepted by the facility.

4.3 Waste Management Facility

The RCRA waste management procedures for Veolia – Menomonee Falls are summarized in Figures 4-1 and 4-1A, Operations Flow sheet. Waste flow paths are referenced in the following discussion by the number assigned in the Operations Flow Sheet. Following this overview, drum, tank, roll-off and lugger-box storage and treatment via stabilization or Repacking/Bulking/Decanting are discussed in more detail.

All wastes (flow path 1) are received at the office where the manifest and shipping papers of each waste load are reviewed. The remaining receiving procedures are performed at other units of the facility as follows:

1. Trucks carrying containerized wastes in containers of various sizes up to cubic yard boxes proceed to the Container Storage Unit where the containers are off-loaded and counted. Wastes received by the facility, will be sampled and analyzed in accordance with the Waste Analysis Plan (WAP) to ensure the waste conforms to the manifest and the pre-shipment characterizations. The containers are then

placed in appropriate storage bays in the Container Storage Unit, Stabilization Unit, or Bulk Container Storage Unit.

2. Trucks carrying containerized wastes in containers of various sizes up to cubic yard boxes proceed to the bulking/repack/decant unit for processing. Waste received by the facility, will be sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and the pre-shipment characterizations. A maximum of twenty (20) 55-gallon containers, or equivalent, of wastes will be stored in the repack/bulking/decant unit.

3. Trucks carrying containerized wastes in containers of various sizes up to cubic yard boxes proceed to the Stabilization Unit for processing through the Stabilization Unit or bulking into roll-off or lugger boxes. Waste material received by the facility, will be sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and pre-shipment characterizations. If these wastes are not processed or bulked the day they arrive at the facility, they will be moved to a RCRA permitted Storage area (by the end of the working day).

4. Trucks carrying solid hazardous wastes in roll-off boxes or lugger boxes proceed to a designated Bulk Solid Storage Unit, where the boxes are off-loaded. Waste material received by the facility, will be sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and pre-shipment characterizations.

5. Trucks carrying solid hazardous wastes in roll-off boxes, lugger boxes, dump trucks, or pneumatic tankers proceed to the Stabilization Unit for processing. Waste material received by the facility, will be sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and the

pre-shipment characterizations.

6. Trucks carrying solid hazardous wastes in pneumatic tankers proceed to the Stabilization Unit to have the waste transferred into the Storage Tank. Waste material received by the facility, will be sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and the pre-shipment characterizations.

An essential aspect of the waste management procedures at the facility is the segregation of incoming wastes by hazard classes. The initial step in waste segregation is performed as part of waste receiving, as follows:

1. Deliveries of wastes in containers of various sizes up to cubic yard containers, for storage, will be directed to a Container Storage Unit or Stabilization Unit (flow path 6).

2. Bulk deliveries of solid waste transported in pneumatic tankers, for storage, will be directed to the Waste Stabilization Unit (flow path 5).

3. Deliveries of solid wastes in roll-off boxes and/or lugger-boxes, for storage, will be directed to one of the two Bulk Solid Storage Units (flow path 3).

4. Deliveries of Solid wastes in roll-off boxes, lugger boxes, dump trucks, and pneumatic tankers, for processing, will be directed to the waste Stabilization Unit; (flow path 4).

5. Bulk waste or containerized waste not intended to be received at Veolia – Menomonee Falls will be diverted to other facilities that will manage these

wastes (flow path 2).

6. Deliveries of waste in containers of various sizes up to cubic yard containers, for repack/bulking/decanting will be directed to the repack/bulking/decant unit (flow path 7).

7. Deliveries of wastes in containers of various sizes up to the cubic yard containers for Stabilization (processing or bulking to roll-off boxes, lugger boxes, or dump trailers) will be directed to the Stabilization Unit (flow path 4).

Container Storage

Incoming wastes in containers of various sizes up to cubic yard containers, for storage, are placed in the Container Storage Unit where receiving procedures are completed. Container storage serves to accumulate appropriate quantities of each class of waste so that similar wastes can be more efficiently processed through subsequent processing steps. Containers are stored as follows:

1. Containers of wastes are to be segregated and accumulated for periodic off-site shipment for treatment (flow path 10).

2. Containers of wastes for repack/bulking/decanting will be stored until an appropriate quantity has been accumulated for processing. When a sufficient quantity has been accumulated the containers will be transferred to the repack/bulking/decant unit for processing (flow path 16).

3. Containers of wastes for Stabilization will be stored until an appropriate

quantity has been accumulated for the processing or bulking into a roll-off box, lugger box or dump trailer. When a sufficient quantity has been accumulated the containers will be transferred to the Stabilization Unit for processing or bulking (flow path 17).

All storage of hazardous wastes in containers of various sizes up to cubic yard containers will take place in the Container Storage Unit, the Stabilization Unit, Depack/Repack/Decant Process Unit, or the Southeast Container Storage Unit.

The repacking/bulking/decanting of wastes is conducted to beneficially reuse the wastes (i.e. Hazardous Waste Fuel), remove wastes from incineration, and improve treatment capabilities, among other operational considerations.

The repack/bulking/decanting will be performed in the repack/bulking/decant Unit, which is described more fully in Section 4.3.4.

Incoming solid wastes in Roll-Off boxes and/or Lugger Boxes designated for storage will be placed into one of the two bulk storage units where receiving procedures will be completed. Bulk containers of hazardous wastes will be transferred to the Waste Stabilization Unit for on-site treatment (flow path 11), or will be shipped off-site for treatment and/or disposal (flow path 8).

Tank Storage (Solid)

Incoming solid waste transported in pneumatic tankers is conveyed into the bulk storage tank (flow path 5) prior to treatment in the Waste Stabilization Unit (flow path 14).

Facility Liquids Management

The scheduled daily facility inspection will ensure that only uncontaminated rainwater will enter into the general facility drainage. Each working day the truck loading/unloading area of the Container Storage Unit and any truck(s) that may be present are inspected. Should a leak be observed, facility personnel would immediately respond to collect and remove all released material for proper disposal. The leaking container would be placed inside a salvage drum, the waste would be repackaged, or any other appropriate measures (i.e. tightening a bung) would be taken to stop the release of materials. This procedure will minimize the release of waste material from leaking containers.

Additionally, in the event of a release, the discharge valve associated with the truck loading/unloading area spill collection sump would immediately be closed. This action would cause any released material to be contained within the systems retention tank, and thus be prevented from leaving the immediate area. The collection sump discharge valve would not be reopened until all released material is removed. When the containment sump discharge valve is open, storm water entering the truck loading/unloading area will flow through a retention tank prior to combining with other facility rainwater (roads, paved areas) for discharge via the surface water discharge outlet. The retention tank is constructed of precast concrete identical to precast concrete manholes.

Any precipitation collected in the containment systems of the Container Storage Unit, Drum Repack/Bulking/Decant Unit, Stabilization Unit, Southeast Container Storage Unit, will be collected and used as process water in the stabilization process (flow paths 25 and 27) or transferred for off-site disposal (flow paths 26 and 28). These units have secondary containment with blind sumps to prevent accidental release of collected liquids. Any precipitation collected in secondary containment will be sampled and analyzed to determine the proper management methods, if it will be shipped off-site for disposal. Precipitation will be removed from the secondary containment by pump to a tank truck or containers or by a vacuum truck. Collected liquids acceptable for use in the stabilization process will be transported to the stabilization unit by tank truck or container. The liquids

will be stored in appropriate containers and pumped to the receiving pit as required by the process.

Sanitary wastes and laboratory wastewaters are collected in holding tanks, prior to transport to a POTW (flow path 34). Laboratory wastewaters are wastewaters collected from the laboratory plumbing system and result from the cleaning of laboratory glassware and equipment. No reagent disposal is authorized via the drain system. The laboratory drain system is equipped with an acid neutralization system as required by Wisconsin code.

Laboratory samples from incoming waste streams and laboratory wastes accumulating from the analysis of incoming waste samples are packaged and disposed of in accordance with state and federal regulations. Typically, hazardous samples and laboratory wastes are lab packed and disposed of by incineration, although other disposal technologies are utilized when appropriate.

4.3.1 Container Storage

This section describes the design, operation, and management of the Container and Roll-Off Box/Lugger Box Storage Units in accordance with NR 664. Containerized wastes are received and stored for on-site treatment or transfer off-site to one of Veolia's integrated treatment and disposal facilities or to an alternate facility.

Although this section describes the Container Storage Unit in terms of management of 55-gallon drums, other sizes and types of containers will be received (e.g., 85-gallon "salvage" drums, 5 gallon containers, cubic yard bags, etc.). These containers may be lab packs (i.e., contain smaller containers within the larger container). These containers will be managed in a manner equivalent to that described herein for 55-gallon drums.

The Container Storage Unit location is shown in Figure 4-2. Containerized waste is received and stored in this unit until it can be scheduled for treatment on-site, or transferred to an off-site facility for treatment and disposal. Analysis of containerized wastes will take place in the facility laboratory or an approved off-site laboratory.

Information developed by application of the Waste Analysis Plan will be used to determine management procedures for the relevant wastes at this facility only. If the management procedure chosen is transfer to another facility, the analyses may be provided to such other facility on an advisory basis. However, the transferred waste shall then be handled according to the Waste Analysis Plan of the receiving facility, including re-analysis if required.

Types and Quantities of Wastes to be Managed in the Container Storage Units

The Container Storage Unit will potentially receive and store all of the types of wastes listed in Tables 4-3 through 4-7. Thus, ignitable, reactive, corrosive, and toxic wastes will be managed in this unit.

Incoming containers of waste have the EPA and DOT labels and markings mandated by 40 CFR 262.32 and 49 CFR 172 that describe the waste contents by name or type and DOT hazard class. These labels provide information to assist sorting the drums, by hazard, and placement of each in an area designated for it. Incompatible wastes are stored separated.

It is expected that an average of 385 containers of wastes will be received each working day by this unit. The maximum amount of wastes that will be in storage at any one time in this unit will be 66,000 gallons, which is equivalent to 1200, 55-gallon containers.

Design of Container Storage Unit

Figures 4-3, 4-4, 4-5, 4-6, 4-7 and 4-8 provide plan, elevation, and section views of the Container Storage Unit. These drawings show that the unit is situated in a steel-frame building having a sheet-metal roof and sheet metal siding on its exterior walls. The Container Storage Unit measures approximately 60 feet by 140 feet. On the east end, it has a loading/unloading dock and waste receiving and initial-sampling area. Container sampling is also performed at other locations within the building. The east end of the building has three large doors to accommodate truck loading and unloading operations.

The floor of the unit is constructed of reinforced concrete. It is curbed all around with a 6-inch high reinforced concrete curb, except on the open side of the loading dock where the floor is ramped up to the curb height to allow forklift truck traffic into trucks being unloaded or loaded without sacrificing curbed containment. Also, a ramp is provided out of the building at the northwest corner. The curb and ramps prevent run-on into the unit and provide containment capacity for any leaks or spills of wastes or floor washing. This containment capacity augments the segregated containment capacities provided by the floor slope and collection systems in the individual storage bays, as described below. The building structure prevents rainfall into the unit.

The floor, curb, and ramps are poured in large monolithic sections to minimize construction joints. Necessary construction joints are packed and sealed with a synthetic, chemically resistant material. The entire floor and inside wall of the curbs and ramps are surface-sealed with a chemically resistant material to ensure that the floor system is impervious to leaks and spills of wastes. Veolia – Menomonee Falls believes that this floor system complies with 40 CFR 264.175(b)(1) and (4) and s. NR 664.0175.

The unit is divided into eight storage bays, each bay being separated by 6-inch high concrete curbs tied into and sealed to the floor. These eight storage bays provide segregated storage of potentially incompatible wastes. Only compatible wastes will be placed into a storage bay.

Drums are stored above floor level on lower and upper racks. Upper level storage racks bordering adjacent storage bays are dedicated for storage of mutually compatible waste materials. Veolia – Menomonee Falls will not store potentially incompatible wastes in the upper rack of rows immediately adjacent to storage bays containing potentially incompatible wastes. This will prevent the possibility of potentially incompatible wastes mixing due to spilling, spraying or leaking.

Aisle Space Requirements (s. NR 664.0035)

Four of the bays each have capacity for the storage of 192 containers in four double-row lots of 48 containers each, assuming each container to be 55-gallons. Three of the other bays each have capacity for 96 containers in two double-row lots of 48 containers each, assuming each container is 55-gallons. The last bay has capacity for 144 containers in three double-row lots of 48 each, assuming each container to be 55-gallons. Lots are arranged in groups of two, with a minimum aisle space of 2'6" between lots in each group to allow for easy inspection. In addition, each group of two lots is separated from adjacent lots by 6-foot-wide aisles to allow easy access for forklift trucks. The placement of containers is shown in Figure 4-3.

The arrangement of containers will vary if they are of sizes other than 55-gallon drums Examples of a variety of configurations are shown on Figure 4-3, but the configurations are not limited to those shown. Containers will always be configured to allow proper inspection and safe management.

Containment (NR 664.0175)

Each of the eight storage bays is equipped with a separate independent sump so that any leaks or spills from wastes in that bay can be kept segregated from container leaks or

spills in any other bay. This feature prevents the commingling of leaks and spills from containers of potentially incompatible wastes that may be simultaneously stored in separate bays of the unit. Each sump is constructed and sealed with the same materials used in construction of the container storage building floor. The sumps measure 1.4 feet by 1.4 feet by 1 foot.

The floor of each bay is sloped toward a separate sump. Containment capacity of the sloped floor and sump within each bay is sufficient to provide segregated containment of 10 percent of the maximum volume of containerized wastes stored in the bay. These containment capacities are shown in Table 4-9. Floor level drums will be stored above the maximum containment level to maximize secondary containment volume and prevent the drum from contacting any spilled liquids.

The rack system design includes the use of support beams and steel lay-in supports for the pallets. This design is common to both the lower and upper storage levels. Regarding the lower storage level, containers will be elevated above the floor level a distance that at a minimum will include the support beam height and the pallet height. Actual heights will vary with the existing floor slope. However, as stated earlier in this section, all containers will be stored above the maximum height required to provide adequate secondary containment capacity.

The loading-dock floor area in the east end of the building is sloped to a separate sump, in an arrangement similar to the storage bays, but separate from any of them. Thus, leaks or spills from containers temporarily held on the loading dock during initial receiving and sampling would drain into a specific sump serving only the loading dock. This helps to avoid commingling of potentially incompatible wastes.

Veolia – Menomonee Falls believes that the design of the bays and the segregated sumps

and containment capacities complies with 40 CFR 264.175 and s. NR 664.0175 and enables compliance with 264.177(c) and s. NR 664.0177(3).

Management of Container Storage Unit

Truckload receipts of containerized wastes are unloaded onto the dock and/or along the south side of the main east/west aisle, where they are counted and sampled as indicated in the Waste Analysis Plan (Section 3.0). Incoming waste is then segregated by waste type, (based upon information provided by the waste material profile sheet, manifest descriptions, drum labels, the compatibility chart (Table 4-10), and sampling results), and placed into the appropriate storage bay designated for that waste type. Veolia – Menomonee Falls and the generator will jointly determine the disposition of rejected waste. All containers remain stored in the bays until they are scheduled for transfer to an off-site facility, or, when appropriate for stabilization, repacking, bulking or decanting at the Veolia – Menomonee Falls facility.

The eight bays are individually designated and clearly marked for storage or transfer of wastes by hazard class in order to achieve segregation of potentially incompatible wastes.

Veolia – Menomonee Falls believes that these procedures for assuring segregated storage of potentially incompatible wastes enables compliance with 40 CFR 264.175(c) and s. NR 664.0175(3).

Materials accumulated from clean up of spills and leaks are placed in proper containers. Only containers in good condition and that are made of material compatible with the waste to be placed in them are used in compliance with 49 CFR 173.24(e). Moreover, appropriate EPA labels mandated by 40 CFR 262.32 will be promptly attached to the drums. These labels give sufficient information to sort the drums and place each in an area

in the Container Storage Unit designated for it, and thereby ensure that incompatible wastes are kept separated. Veolia – Menomonee Falls believes that these procedures will enable compliance with 40 CFR 264.171, 264.172, and 264.177(a) and (b) and s. NR 664.172 and 664.0177.

Most container movement operations, including truck loading/unloading operations, are performed by forklift trucks equipped with drum-grappling tongs or other appropriate devices (e.g., forks for palletized containers) capable of handling containers without damaging them. Some drum movements may be made with drum handling hand trucks. Loose small containers (5 gallons or less) may be hand carried. Containers (55 gallons and larger) are not stacked more than two high.

All employees are trained on the importance of careful handling procedures to avoid rupture or damage of containers.

All containers in storage are kept closed except when being sampled.

Only spark-resistant tools are used to open containers. Veolia – Menomonee Fall believes that these procedures and those for handling container movement enable compliance with 40 CFR 264.173 and s. NR 664.0173.

Because ignitable wastes are stored in the Container Storage Unit, smoking, welding, and other ignition-causing activities are not permitted in or near the unit unless appropriate precautions are taken for maintenance activities. The unit is equipped with a foam sprinkler system and appropriate fire extinguishers and is accessible to outside fire-fighting equipment.

Any leaking containers are repackaged, placed in salvage containers, or repaired by an

appropriate means (i.e. tighten bung) to stop the leak. Empty containers including salvage containers are maintained at Veolia –Menomonee Falls for such use. Small leaks or spills are covered with absorbent material, swept up, placed in a container(s) and periodically treated on-site or shipped to an off -site hazardous waste facility for treatment and/or disposal. Only containers in good condition and that are made of material compatible with the waste to be placed in them are used in compliance with 49 CFR 173.24(e). Veolia – Menomonee Falls believes that these procedures enable compliance with 40 CFR 264.171, 264.172, and 264.177(a) and (b) and s. NR 664.0171.

Appropriate EPA labels mandated by 40 CFR 262.32 will be promptly attached to the drums, used to pick up waste spills. These labels provide information to sort the drums and place each in an area in the Container Storage Unit designated for it, and thereby ensure that incompatible wastes are kept separated. The floor of the unit is periodically swept and washed to maintain a clean working environment. Liquids in the sumps from leaks, spills, or floor washing are removed as soon as practical after being observed. Veolia – Menomonee Falls believes that these procedures enable compliance with 40 CFR 264.171, 264.172, 264.175(b) (5), and 264.177(a) and (h).

The Container Storage Unit is inspected daily in accordance with the Inspection Plan in order to comply with 40 CFR 264.174 and s. NR 664.0174.

Because ignitable and reactive wastes are stored in the Container Storage Unit, this unit is set back more than 50 feet from the nearest property line so as to comply with 40 CFR 264.176 and s. NR 664.0176.

4.3.2 Southeast Container Storage Unit

The Southeast Container Storage Unit is intended for the storage of hazardous waste.

Storage in this unit will be in roll-off or lugger boxes, or other container of various types and sizes. The area is depicted in Figure 4-17. The area is approximately 159 by 310 feet, separated into four sections to allow for segregation of incompatible wastes. The building allows 12 roll-offs (or a total volume of 48,468 gallons in all containers) to be stored on the east side, and 12 roll-offs (or a total volume of 48,468 gallons in all containers) to be stored in the south (in two 6 roll-off box sections), and 24 roll-offs ((or a total volume of 96,936 gallons in all containers) to be stored in the center section.

Each section has secondary containment capacity adequate to contain the volume of the largest container stored or ten (10) percent of the total stored as required by s. NR 664.0175, Wis. Adm. Code. The entire unit has the capacity to store up to 48 roll-off boxes, or a configuration of roll-off, lugger boxes and other containers not to exceed 193,872 gallons total. Any spill within the storage area is contained by the sloped floor, trench, and sump. A one-foot high concrete wall separates storage areas and prevents spillage from going outside the perimeter of the building. The storage unit is covered with a steel roof and steel wall sidings, except for one side on each section that is open for delivery and pickup of roll-off containers. The Southeast Container Storage Unit is separated from the stabilization and storage building by a distance that is required by the Village of Menomonee Falls Zoning Ordinance. Specifically, 30 feet to street; 10 feet to rear; and 10 feet to side in accordance with Section 17.035 of the Zoning Ordinance.

A roll-off box is a steel bin with bottom wheels and a removable top cover. A typical 20 cubic yard Roll-Off Box is capable of containing 4,039 gallons of waste.

Storage Design

Floor

The storage floor is divided into four sections, each section separated from the others by a concrete barrier. The floor of each storage section is constructed of reinforced concrete to withstand the weight of the roll-off boxes. The floor is constructed with a minimum number of joints, and each joint is caulked with a chemical- resistant sealing material. Each section of storage floor has a nominal one-foot four-inch slope from front to back, draining into a trench near the rear concrete wall. These trenches are nominally one foot wide, with sloped bottoms beginning at approximately 6 inches deep and sloping 1/8 inch per foot, discharging into a 3-foot square by 3-foot 11-inch deep sump in each section.

Secondary Containment

The contained volume in each section, which includes the sloped storage floor up to the level of the concrete wall, the trench, and the sump, is approximately 23,000 gallons, or 3075 cubic feet. Detailed containment calculations are presented in Tables 4-14, 15, and 16.

Because the containment structures are inspected daily, if a material accumulates in the containment, Veolia employees will be able to identify any material spilled by identifying the source of the spill. In a rare instance where the source is not able to be identified, a sample will be taken and analyzed in the lab to identify the material.

Moisture Barrier

A synthetic liner has been placed under the concrete floor to provide a moisture harrier.

Protective Coating

Epoxy flooring system with high chemical resistance is applied to the floor, wall, trenches, and sump to prevent the penetration of the waste through the concrete floor.

Concrete

The storage area is constructed of 8-inch thick concrete, reinforced with appropriate steel mesh, which was poured continuously with a minimum number of expansion joints. All concrete work conforms to the specifications of the American Concrete Institute.

Building Structure

The storage areas are covered by a roof constructed with steel frames, supported by columns along the perimeter. The structure has an eave height of approximately 18 feet, steel roof decking, and upper sidewalls. Columns are supported on concrete piers that extend above the containment area.

Drainage System

Rainwater that is collected in the secondary containment system is transferred by a pump or vacuum tanker truck into appropriate containers for subsequent management.

Electrical

The building is furnished with suitable lighting fixture, lamps, switches, outlets, wire conduit, and all other equipment necessary to complete the electrical system.

All of the electrical system is designed to NEMA 4X standards.

Management of Bulk Containers in the Southeast Container Storage Unit

Incoming bulk containers are off-loaded directly into the covered storage unit. Waste received by the facility, is sampled and analyzed in accordance with the Waste Analysis Plan. Covers are kept on the boxes at all times, except when sampling the particular boxes. Solid wastes received in bulk containers are primarily inorganic wastes that are compatible with each other. However, analyses will be conducted to ensure that any hazardous waste placed in the storage unit is compatible with other wastes stored in that section. Veolia – Menomonee Falls believes that such procedures for assuring the compatibility of wastes stored in the Southeast Container Storage Unit enable compliance with 40 CFR 264.177(c) and s. NR 664.0177. Wastes in bulk storage containers are stored until either treated on-site or transferred off-site for treatment and disposal.

Roll-Off/Lugger Boxes are handled by the self-loading/unloading mechanisms on the transportation vehicles. Facility personnel are carefully trained (as described in the Training Plan) on the proper techniques for handling Roll-Off Box and Lugger-Box containers. Veolia – Menomonee Falls believes that such care in handling meets the requirements of 40 CFR 264.173(b) and s. NR 664.0173(2).

Should a leaking container be discovered during the daily inspections of the storage unit, the container will be repaired in place and without unloading if this is practical and determined to be safe to perform. Mechanically fastened patches may also be used. No welding or other methods involving heat will be used. If such repair is not practical and safe, the bulk container contents will be transferred to another lined bulk container, or to drums, whichever is available and convenient. Such alternate containers will be empty, clean, in good condition, and compatible with the materials to be transferred into them.

Both the interior of the leaking box and any materials spilled on the slab during the transfer will then be cleaned up by successively shoveling and/or brushing up loose solid waste materials. The shoveled or brushed up wastes would be placed in the same container(s) as the transferred wastes. The leaking, cleaned bulk containers will then be repaired, either in place or by removing it to another location on or off-site. If done in place, no welding or other methods involving heat will be used, and due care will be taken to avoid damaging nearby containers. Veolia – Menomonee Falls believes that these procedures enable compliance with 40 CFR 264.171, 264.172, and 264.177(a) and (b) and s. NR 664.0171 and 664.0172.

Any wash waters or rinse water generated during cleaning of the unit will either be used as process water for the stabilization unit or will be transferred off-site for disposal. Veolia –Menomonee Falls believes that these procedures enable compliance with 40 CFR 264.175 (b) (5) and s. NR 664.0175(2)(e).

The Southeast Container Storage Unit will be inspected daily in accordance with the Inspection Plan in order to comply with 40 CFR 264.174 and s. NR 664.0174.

In addition, non-Bulk containers may also be placed into storage in the Bulk Container Storage Unit. These containers will be received at a receiving dock and then transferred to the Southeast Container Storage Unit.

4.3.3 Drum Repack/Bulking/Decant Unit

The Repack/Bulking/Decant processes are intended to separate mixed-phase wastes to allow separate handling and consolidation of the liquid and solid phases from various shipments, to package waste for shipment as a hazardous waste fuel or for treatment, to reduce the quantities of absorbents and packaging being incinerated, among other

operational considerations.

In addition to separating mixed-phase wastes, containers with organic content will be combined. The resulting mixture will meet the acceptable specifications of cement kilns. These specifications vary depending on the cement kiln the material is shipped to but are typically greater than 2500 Btu/pound and less than fifty percent water content.

The flow of waste materials through the facility, both storage and treatment units, is shown schematically in the Operations Flow Sheet, Figure 4-1 and 4-1A.

Waste Generated

Wastes generated by facility operations in the Repack/Bulking/Decant Unit include empty containers, absorbent, potentially contaminated PPE, clean-up wastes and spills of wastes.

Where possible, any liquids spilled at the Repack/Bulking/Decant units will be pumped back into the process and handled in the normal manner. Materials used to cleanup up liquid spills, and any spilled solid hazardous wastes, will be placed in containers and either stabilized or shipped off-site in the same manner as the waste itself would have been if not spilled.

Air Discharges

All process exhausts will pass through appropriate air pollution control equipment to limit emissions of organic solvent and other vapors. Currently all the exhaust air from the process is directed through a flame arrestor and then it passes through a carbon canister that contains 3000 pounds of activated carbon. In addition, when necessary, the exhaust can also be routed through a wet scrubber system that will adjust the pH of the exhaust to

neutral. The facility air emissions are covered by Registration Operating permit number 268430470-ROPA which is included in Appendix B.

Storage and Other Procedures

This section covers appurtenances and procedures for the storage of hazardous waste beyond the end of the processing day, for the control of dust, odors, fire, and windblown materials and potential explosions, and for the handling of hazardous waste in the case of a major facility breakdown.

Emptied containers from the repack/bulking/decanting process will be crushed using a drum crusher and shipped off-site for disposal or sent to a reclaim facility for reclamation.

Appropriate EPA labels mandated by 40 CFR 262.32 will be promptly attached to drums of settled solids or sludges removed from Repack/Bulking/Decant Unit and to containers of absorbent materials used to pick up waste spills. These labels will give information to sort the drums and place each in an area in a Container Storage Unit designated for it, and thereby ensure that incompatible wastes are kept separated. Veolia – Menomonee Falls believes that these procedures will enable compliance with 40 CFR 264.171, 264.172, and 264.177(a) and (b) and s. NR 664.0171, 664.0172.

The segregation of wastes by type minimizes the possibility of interactions between incompatible wastes that might cause a fire, explosion, or other reaction. The physical and operational precautions used to exclude potential ignition sources such as open flame, heat, or sparks from tools from areas of the facility where flammable materials are stored or handled are described below.

Because ignitable wastes are processed in the Repack/Bulking/Decant Unit, smoking,

welding, and other ignition-causing activities are not permitted in or near the unit unless appropriate precautions are taken. Also, the unit is equipped with fire extinguishers and is accessible to outside firefighting equipment.

Because ignitable and reactive wastes are handled in the Repack/Bulking/Decant Unit, this unit is set back more than 50 feet from the nearest property line so as to comply with 40 CFR 264.176 and s. NR 664.0176.

It should be noted as well that highly reactive, such as, explosive or shock-sensitive, wastes are not accepted or handled at the facility. The following wastes will not be accepted by the facility:

- Radioactive wastes (regulated by the NRC)
- Explosive and shock-sensitive reactive wastes (see Table 4-8)
- Air-reactive wastes
- Certain compressed gases (see Table 4-8)

Furthermore, as part of the normal operating procedure, the General Manager or his/her designee will have the authority to refuse receipt of any waste that he/she deems cannot be managed in a safe and environmentally sound manner.

The Repack/Bulking/Decant operation changes only the physical form of the wastes, that is, it separates liquid and solid phases, and does not involve any chemical reactions. Thus a process breakdown, (e.g., due to an electric power failure), cannot create a hazardous condition. The drums can be closed and placed back into storage, and/or transferred off-

site without processing if the power failure is prolonged.

To further guard against unforeseen events, the facility has comprehensive plans for waste analysis, ongoing facility inspections, and personnel training, as described in later sections. A comprehensive and detailed Contingency Plan describes procedures in the event of a spill or other emergency.

Container Decant Process

The containers of wastes received by the facility that contain organic liquid or pumpable wastes will be decanted into a semi-tanker and subsequently shipped off-site in bulk for reclamation or treatment. Exceptions will be containers that hold (1) insignificant amounts of liquid or pumpable wastes or (2) principally non-recoverable organic wastes. These containerized wastes will be accumulated and either treated on-site as described in Section 4.3.4 or transferred to another Veolia or alternate facility where they can be treated and/or disposed.

Containers of pumpable organic wastes, after being sampled, analyzed, and categorized by waste class, will be transferred to the Repack/Bulking/Decant Unit from one of the Container Storage Units or from the transportation vehicle as it arrives at the facility. These containers will be opened and their liquid and pumpable waste contents will be removed by pumping at the decant stations. Decanted containers can be closed and returned to the Container Storage Unit. Those that have been emptied by decanting will be crushed and disposed of off-site or will be sent to a drum recycling facility for reclamation.

The containers are delivered to the Repack/Bulking/Decant Unit on a transportation vehicle (i.e. semi-trailer) or by forklift from a Container Storage Unit. The transportation

vehicle will be parked at the sunken dock west of the Repack/Bulking/Decant Unit to contain any leaks or spills and for ease of movement of containers from the transportation vehicle into the Repack/Bulking/Decant Unit. The containers remain closed until positioned for decanting by forklift, handcart and/or roller conveyor.

The containers are opened and the lids removed (if open top containers). A vacuum hose is placed in the container to remove the liquids. The vacuum hose is connected to a strainer and then to a semi-tanker.

To remove as much liquid as possible from each container, a round mesh screen on the end of a handle is used to push the solids to the bottom of the container (this device is similar to a potato masher). If solids remain in the container, every attempt is made to empty the container at this time and not place the container in storage.

The empty containers are crushed and disposed of off-site or sent off-site for reclamation.

Every attempt will be made to complete the transfer of waste into the semi-tanker in one workday. This will include manifesting the waste shipment off-site at the end of the workday. In order to accommodate equipment breakdowns, transportation problems, disposal facility shutdowns, etc. the license allows for the storage of three 6,000 gallon semi-tankers and twenty (20) 55-gallon containers of hazardous waste in the Repack/Bulking/Decant unit.

Repack/Bulking Process

Any material in the drums that was not emptied by decanting will be subject to repackaging or if there is sufficient volume, the drums can be accumulated for on-site

treatment as described in Section 4.3.4 or transfer off-site for treatment and/or disposal. In repackaging, the container will be picked up with a forklift (or similar equipment), tilted, and the waste scraped into a different container. Only compatible wastes will be repackaged together. Containers to be used will be appropriate for the waste material and for the type of treatment and/or disposal the waste will be subject to (e.g., burnable vs. metal containers).

Repackaging of lab packs involves removing closed bottles and jars from one lab pack drum and consolidating them into another. This may become necessary for a number of reasons. The most common is small lab packs are consolidated into one larger lab pack drum. Repackaging of lab packs will be performed in the Container Storage Unit or the Repack/Bulking/Decant Unit.

When material is repackaged, the individual bottles are removed from the original lab pack and placed into a new lab pack drum. These original bottles are tracked and corrections to the original paperwork are made to reflect the new location of the lab packed material. Only compatible wastes are lab packed together.

Certain bulk solid waste materials in storage will require repackaging prior to being treated and/or disposed (e.g. incineration requires material to be packaged in burnable drums or "charges"). Repacking of bulk solid waste material will be performed in the Repack/Bulking/Decant Unit or the Stabilization Unit.

Types and Quantities of Wastes to be Managed in the Repack/Bulking/Decant Unit

All of the types of recoverable organic wastes listed in Table 4-3 may be processed in the Repack/Bulking/Decant Unit. The decant unit only is applicable to those wastes listed that are pumpable. Small quantities of those non-recoverable liquid wastes also listed in Table

4-3 also may be processed in this unit, to the extent these wastes are mixed in with the other classes of containerized wastes received and processed at the facility.

The container Repack/Bulking/Decant Unit is expected to process an average of 250 containers per day. However, higher rates may be occasionally experienced. The maximum capacity of the drum decant unit will be 600 containers/day (based on three shifts per day).

Design of Repack/Bulking/Decant Unit

The Repack/Bulking/Decant Unit consists of a poured, concrete slab with minimal expansion joints. A six-inch concrete curb encloses the concrete slab. The concrete flooring slopes up from the floor to the top of the curb on the east and west ends of the unit to allow for the safe movement of containers into and out of the unit. The curb and ramps prevent run-on into the unit and provide containment capacity for any leaks or spills of wastes or floor washing.

The floor, curb and ramps are poured in large monolithic sections to minimize construction joints. Necessary construction joints are packed and sealed with a synthetic, chemically resistant material. The entire floor and inside wall of the curbs and ramps are surface sealed with a chemically resistant material to ensure that the floor system is impervious to leaks and spills of wastes.

Veolia – Menomonee Falls believes that this floor system complies with 40 CFR 264.175(b)(1) and (4) and s. NR 664.0175(2)(a) and (d).

Figure 4-20 provides a diagram of the Repack/Bulking/Decant Unit. Vapor/fume collection vents are located at three pick-up heights in the depacking area wall of the unit.

The exhaust from the collection vents is routed through a carbon filter and/or a wet scrubber. In addition, there are vapor/fume collection vents positioned at low, medium and high pick up points located throughout the drum decanting process area.

A safety eyewash and shower unit is installed on the south wall within the depacking area and the east wall in the drum decanting process area.

Equipment used during the decanting of wastes into tankers is portable and will be placed in the unit during decanting operations. The equipment is decontaminated after decanting and stored in various locations throughout the facility.

Description of the Containment System

The containment structure is a thirty-foot by thirty-nine foot (30x39) reinforced concrete pad surrounded by a six-inch high nine-inch wide reinforced concrete berm. The containment structure is covered with an impervious coating. A copy of the material safety data sheet for the coating in included in Appendix D.

The only liquids entering the containment system would most likely be from spills. It is unlikely that rain or other liquids would enter the structure through an open roll-up door due to the berm that surrounds this unit. The procedures currently in place require any liquids, whether spills or rainfall, to be immediately cleaned-up once they are discovered.

The containment system has a capacity of 3980 gallons. The following are the calculations used to derive the capacity:

> Multiplying the inner dimensions of the containment system gives us the volume of the containment system in cubic inches:

468 inches by 360 inches by 6 inches = 1,010,880 cubic inches.

Dividing the volume by 1728 gives us the volume in cubic feet:

1,010,880/1728 = 585 cubic feet

The size of the four ramps into the secondary containment needs to be subtracted from the total volume:

0.5 x 55 inches x 6 inches x 166 inches = 27,390 cubic inches

0.5 x 55 inches x 6 inches x 197 inches = 32,505 cubic inches

0.5 x 55 inches x 6 inches x 120 inches = 19,800 cubic inches

0.5 x 55 inches x 6 inches x 72 inches = 11,880 cubic inches

Total = (27,390 + 32,505 + 19,800 + 11,880)/1728 = 52.99 cubic feet

The actual containment capacity in cubic feet is:

585 – 52.99 = 532.01 cubic feet

Multiplying this by 28.316 converts the volume to liters:

532.01 x 28.316 = 15,064 liters

Dividing this by 3.785 converts the volume to gallons: 15,064/3.785 = 3980 gallons

The entire collection facility is covered with a roof and four walls to prevent rainfall run-on, with four roll-up doors, and two man doors providing access to the facility. Also, the berms surrounding the containment system are raised above ground level and ramps are provided for the safe movement of materials and personnel into and out of the facility.

Sunken Dock Secondary Containment

The sunken dock west (see Figure 4-18) of the Repack/Bulking/Decant Unit is where the tanker will be located while materials are being transferred into it. In addition, waste containers to be processed may be delivered to the Repack/Bulking/Decant Unit on a straight truck or semi-trailer that will be positioned in the sunken dock to allow for the movement of the containers into the unit using a forklift or similar mechanical device.

The sunken dock was constructed in 2001 and consists of a ten inch thick steel reinforced poured concrete base. Sidewalls are ten inch thick steel reinforced concrete with a twelve inch thick steel reinforced concrete end wall that is constructed to standard dock height of four feet. In addition, the dock has two power assisted dock plates to allow for safer access to trailers. The entire surrounding is protected by 11/2 inch pipe railing.

At any time, a maximum of three – 6,000 gallon tankers will be stored in the sunken dock at any one time.

The sunken dock has a containment capacity of 20,645 gallons. The following are the calculations used to derive the capacity based on the dimensions from Figure 4-18:

Volume = ½ base x height x width = ½ x 34.5 ft x 4 ft x 40 ft = 2760 ft^3

Multiplying by 7.48 converts the volume to gallons:

2760 x 7.48 = 20,645 gallons

Management of the Repack/Bulking/Decant Unit

Containers of the same class of wastes will be decanted in batches. Before decanting begins, these wastes will have been analyzed and assessed, in accordance with the Waste Characteristics, to determine that the wastes within the batch are (1) compatible with each other, (2) compatible with the materials-of-construction of the decant equipment and semi-tanker, (3) compatible with the wastes previously handled by the decant equipment and semi-tanker used, and (4) compatible with the wastes in the semi-tanker to which the decanted wastes are to be transferred. If these four areas of compatibility cannot be assured, the batch of waste will not be decanted. If the decanting equipment and semi-tanker have handled an incompatible waste in the previous decanting operation, they will be emptied of the prior waste and thoroughly flushed before decanting of the incompatible waste begins. These removed liquids typically will be transferred off-site for treatment and disposal as non-reactive wastes. Veolia – Menomonee Falls believes that these procedures will enable compliance with 40 CPR 264.192(a) and 264.199 and s. NR 664.0192 and 664.0199.

Before and during the decanting of wastes and the transfer of wastes to a semi-tanker, the operator will observe the level-of-liquid indicator and stop decanting/pumping operations before any potential overfilling of a semi-tanker occurs.

Wastes will be delivered to the Repack/Bulking/Decant Unit individually or in groups using a forklift or on a straight truck or semi-trailer or other similar means. The straight truck or semi-trailer will be parked at the sunken dock west of the Repack/Bulking/Decant Unit to contain any leaks or spills and for ease of movement of containers. If the waste is delivered to the Repack/Bulking/Decant Unit on a straight truck or semi-trailer, a forklift or similar mechanical device may be used to arrange the waste containers in the unit.

The wastes will be delivered to either the east or west end of the unit.

A maximum of twenty (20) 55-gallon containers, or equivalent, of hazardous waste will be stored in the Repack/Bulking/Decant Unit.

Repacking

Repacking is conducted in both the Repack/Bulking/Decant Unit and the Container Storage Building. The repacking consists of opening the outer containers of lab packs and rearranging the inner packaging into separate containers. The inner packages are not opened.

The repackaging of wastes minimizes the number of containers stored and shipped off-site for disposal. It also reduces the quantity of absorbent that is shipped to disposal facilities.

Containers emptied during repacking operations along with the absorbent removed from the containers may be reused at the facility or by other Veolia locations.

Following are examples when repacking is conducted:

1.) Containers are labpacked at several different customers' sites and delivered to Veolia – Menomonee Falls for storage. The contents of the inner packages of all the containers are similar. The contents of several containers can be repackaged into a single container.

2.) Containers are labpacked at customers' sites and delivered to Veolia – Menomonee Falls for storage. The contents of the inner packages, although compatible, could be sent to more than one facility for treatment or recovery. The contents can be repackaged into separate containers and shipped to the most appropriate facility for treatment or recovery.

Bulking

Bulking of like materials will be conducted in the Repack/Bulking/Decant Unit. The bulking consists of emptying/pouring lesser amounts of similar chemicals into a larger container. An example of this would be pouring the inner packages of a flammable liquid labpack into a 55-gallon drum.

The containers to be bulked will be delivered to the Repack/Bulking/Decant Unit. Once within the secondary containment of the unit the outer container will be opened. The contents of the container will be reviewed and compared to the profile or inventory (for labpack containers). The review is conducted to ensure that like materials are bulked (i.e. all wastes are flammable).

Next, a compatibility test will be conducted. The compatibility test will consist of pouring a small portion of the first waste to be bulked into a "compatibility test" container. A small portion of the second waste stream will be added to the "compatibility test" container. The contents of the "compatibility test" container will be visually monitored for

any incompatibilities (i.e. heat generation, fume generation, etc.). If no incompatibility is observed the waste will be poured into a larger container (normally a 55-gallon drum). A portion of each successive waste stream will be added to the "compatibility test" container and if no incompatibility is observed the wastes will be added to the larger container. The last waste added to each larger container will be the waste from the "compatibility test" container.

As soon as a container has been filled the container will be closed and labeled. The container will either remain in storage in the Repack/Bulking/Decant Building, or, placed into permitted RCRA Storage.

Any wastes that fail the compatibility test will not be bulked. The container will be closed and returned to storage, or, if the waste was from a labpack, a "new' labpack container will be created.

The bulking and compatibility testing will be conducted under air collection vents that are routed through a carbon unit and/or a wet scrubber, to reduce or eliminate any fugitive emissions.

Decanting

The decanting will only be conducted in the Repack/Bulking/Decant Unit. The decanting consists of pumping similar chemicals from 55-gallon (or similar sized) containers into semi-tankers. An example of this would be pumping flammable liquids from 55-gallon containers into a semi-tanker.

The containers to be decanted will be delivered to the Repack/Bulking/Decant Unit. Once within the secondary containment of the unit the containers will be opened. The contents

of the containers will be reviewed and compared to the profiles. The review is conducted to ensure that like materials are decanted (i.e., all wastes are flammable).

Compatibility testing will be conducted prior to decanting. The compatibility testing will be conducted as outlined in the Bulking Section of this report. The compatibility testing may be conducted in the Veolia – Menomonee Falls laboratory prior to selecting the containers to be decanted. The compatibility testing is done by combining representative samples of all containers to be decanted and observing the comingled sample for evidence of reaction such as temperature change, off gasing, or changes in physical state.

The semi-tanker will be positioned in the sunken dock west of the Repack/Bulking/Decant Unit. The hose for decanting is attached to the tanker. Some wastes (i.e. waste paints) may require that the hose be attached to a filter prior to connecting to the semi-tanker.

The hose will be lowered into the open 55-gallon container to vacuum out the liquids. Additionally, a strainer shaped like a potato masher may be used to push any solids to the bottom of the container and remove as much free liquids as possible. When all possible free liquids have been removed, the hose will be removed and lowered into another 55-gallon container.

After vacuuming off the free liquids, if no solids remain in the bottom of the container, the container will be considered RCRA empty. The RCRA empty containers will be crushed and landfilled, shipped off-site to a drum reconditioner / recycler, or the container will be closed and saved for reuse in the bulking operation. The facility does not anticipate decanting acutely hazardous waste however if done the empty container will be closed and managed as a hazardous waste. Veolia – Menomonee Falls does not

intend to triple rinse acutely hazardous waste containers.

If solids remain in a container it will be inspected to determine if it is RCRA empty. If the container is RCRA empty, as defined in 40 CFR 261.7 and s. NR 661.07, the container may be managed as described above. If there is a great enough quantity of waste remaining in the container that it is not considered RCRA empty the container will be closed and returned to storage or repackaged.

To repackage the solids a mechanical lift (i.e. forklift) is used to lift and tilt the container over a 55-gallon or other container. A long handled hoe, or similar device, will be used to scrape the solids out of the tilted container into the other container. If enough solids can be removed to render the container RCRA empty the container will be crushed and landfilled, shipped off site to a drum reconditioner / recycler, or closed and saved for reuse in the bulking operation. If enough solids cannot be removed to render the container RCRA empty, the container will be closed and returned to storage.

The solids container and any containers that cannot be emptied will be properly labeled and placed into storage.

The decanting into semi-tankers is expected to be accomplished within one workday. Therefore, for routine operations a semi-tanker will be filled and manifested off-site on the same day. Three 6,000 gallon semi-tankers can be stored on-site.

Because ignitable wastes will be processed in the Repack/Bulking/Decant Unit, several procedures will be employed to protect against ignition of these wastes. No smoking, welding, or other ignition-causing activities will be permitted in or near the unit. Grounding and bonding procedures will be followed to prevent the build-up and/or discharge of a static charge.

Reactive wastes will not be decanted in the unit. Veolia –Menomonee Falls believes that this precaution and the precaution delineated above for ignitable wastes will enable compliance with 40 CFR 264.198(a) and s. NR 664.0198.

Small spills or leaks of waste onto the floor of the Repack/Bulking/Decant Unit will be removed promptly and containerized for proper management.

Inspection of the Repack/Bulking/Decant Unit and the operations therein will be performed pursuant to the Inspection Program Plan (Appendix A) to comply with 40 CFR 264.15 and s. NR 664.0015.

4.3.4 Waste Stabilization Unit

The treatment process described in this section is a chemical/physical process that stabilizes wastes by immobilizing the hazardous constituents. The chemical portion of the process involves the addition of an agent, generally cement, pozzolon, phosphate(s), or other bonding materials to the waste stream. Chemical oxidizing and/or reducing agents are employed as required for effective treatment of the waste. The physical portion of the process involves mixing of the materials resulting in the physical/chemical change that occurs during curing.

Waste Receipt

In order to provide efficient waste management at the Waste Stabilization Unit, all wastes are received by appointment and are sampled and analyzed in accordance with the receipt control procedure described in the Waste Analysis Plan. If a waste is not acceptable (i.e., does not conform with the generated Waste Material Profile or Waste Information Profile verified by pre-acceptance testing), Veolia – Menomonee Falls follows the required

rejection procedures established by both WDNR and USEPA. If a waste is acceptable, it is accepted into the stabilization facility. The pre-acceptance and in-coming receipt control verification processes ensure application of the correct stabilization formula and ensures against acceptance of a waste which is incompatible with the stabilization process.

All wastes received for stabilization will go through the process depicted in Figure 4-11. Wastes will arrive primarily in bulk loads however certain generators transport their waste in small containers such as drums and bulk bags.

After wastes have been verified for acceptance, the waste is moved to the treatment area. In most cases, the waste will be off-loaded immediately into the stabilization process. In all cases, wastes will be processed as soon as possible after arrival. A designated staging area will be utilized to stage loads prior to treatment if immediate processing is not practical.

Additionally, waste may be temporarily stored in one of the facility Container Storage Units until treatment can be scheduled.

All incoming bulk wastes awaiting treatment in the staging area (or storage unit) will be covered to prevent entry of precipitation and to prevent air emissions. Incoming wastes will be entered in the facility operating record in order to identify each shipment, date of receipt, and other pertinent information. A flow diagram of the stabilization process is shown in Figure 4-11.

All bulk wastes received for stabilization, with the exception of fine particulate wastes (which will only be pneumatically transported into the waste storage silo), will be off-loaded into the bulk bin at the beginning of the treatment process. The bulk bin is used as a treatment tank and is subject to the tank regulations in s. NR 664 Wis. Adm. Code. Prior

to receipt in the bin, the waste will have been inspected and approved for processing, both in terms of chemical compatibility and waste code compatibility. The receiving bin is used for treatment, to blend wastes from several containers, and/or add secondary reagents to establish physical characteristics necessary for processing through the stabilization process. Secondary reagents can be in liquid or powder form. They will be manually added to the receiving bin from a bag, bottle, carboy, or container storage. The receiving bin is constructed of a single carbon steel shell with reinforcement. The bin is installed in concrete secondary containment. The bin and installation meet the requirements of chapter NR 664 of the Wis. Adm. Code and has been inspected and certified by an independent Professional Engineer.

The majority of wastes treated in the Stabilization Unit are inorganic materials that are characteristically hazardous due to a RCRA regulated metal. These include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Examples include leaded paint debris, soils contaminated with various metals, and baghouse dust that are contaminated with various metals. The steel receiving bin and waste silo are suitable to be used for these wastes types based on them being compatible and as evidenced by more than twenty years of use.

The bulking of wastes from drums into roll-off boxes or lugger boxes will be conducted in order to improve the operational efficiency of the site. Drums of waste may be bulked prior to being dumped into the bulk receiving bin, therefore, improving the operational efficiency of the stabilization unit.

Some waste is first received at the site in drums. These drums are sampled and received in accordance with the Veolia – Menomonee Falls Waste Analysis Plan. The waste is placed into one of the RCRA permitted container storage units at the facility.

Non-Bulk containerized waste may also be staged in the Stabilization building. A sufficient quantity can be staged in order to provide 24-hour operation of the Stabilization process. All of this non-bulk waste will be safely staged, contained and fully inspectable.

Incoming non-bulk containers received into the Stabilization Building Storage Area will be processed or bulked within 72-hours. If the waste cannot be processed or bulked within 72-hours it will be removed from staging and placed into one of the RCRA permitted container storage units.

Wastes moved from a RCRA permitted Container Storage Unit and placed in the Staging Area will be processed or bulked within 72-hours. If the waste cannot be processed or bulked within 72-hours it will be returned to a RCRA permitted Container Storage Unit.

A bulk container will be placed within the secondary containment of the Stabilization Unit for bulking. First the bulk container will be lined. The non-bulk containers will be opened, picked up by mechanical means (i.e. forklift), and the contents emptied into the bulk container. As soon as the bulking has been completed, any spilled material will be cleaned up and placed in the bulk container. The bulk container will then be closed (tarped) and labeled. The bulk container will be issued a Veolia Inventory Control Number and placed into a RCRA permitted Bulk Storage Unit.

Waste will be removed from the non-bulk containers until they are RCRA empty as defined in 40 CFR 261.7 and s. NR 661.07. The empty containers will be crushed and landfilled, shipped off-site to a drum reconditioner / recycler, or closed and saved for reuse at the facility.

The operating record will be updated to show that the waste has been removed from the permitted RCRA Container Storage Unit and is now in a RCRA permitted Bulk Storage

Unit.

Fine particulate waste will be transported to Veolia – Menomonee Falls in bulk bags, drums or pneumatic trucks. Trucks will be unloaded directly into the waste storage silo using conventional truck mounted equipment. The tanker trucks will be parked in the designated area on the west side of the Stabilization Building for sampling. Once testing is completed, the waste is pneumatically conveyed into the waste silo using the air supply of the tanker truck. Material received in drums will be consolidated in a vacuum/pneumatic truck tank and then pneumatically transferred to the waste storage silo. Bulk bags (super sacks) will be processed by being placed directly into the processing bulk bin and mixed with the excavator.

Liquid wastes destined for stabilization will be transported to Veolia – Menomonee Falls in tank trucks, bulk totes, or non-bulk containers. Tank trucks will be off-loaded via gravity discharge directly into the bulk bin once they have been accepted and cleared for processing. Non-bulk containers to be stabilized will also be gravity fed into the bulk bin directly or bulked into a tank truck onsite and then transferred to the bulk bin for stabilization processing.

Stabilization Reagents

Veolia – Menomonee Falls uses Portland Cement and high calcium cement kiln dust because it is readily available in the area of the facility. Secondary reagent is currently being handled in 50-pound bags and cubic yard bags that are delivered to the site and stored on pallets. Palletized secondary reagent is stored in either the Stabilization Unit, the storage area associated with the Southeast Container Storage Unit, the maintenance garage, or the building which is attached to the north end of the nonhazardous processing building and was constructed for the purpose of storing materials.

Secondary reagent is introduced into the bulk-receiving bin. The bags of reagent are then mixed together using an excavator.

Operators handle the secondary reagent under the direction of site management. There is no supplemental training for the handling of secondary reagents other than OSHA Hazard Communication training.

Liquid and solid non-RCRA hazardous waste will also be introduced into the bulk bin for solidification. This process is covered under Solid Waste Processing License (#3002) issued by Wisconsin Department of Natural Resources. This process utilizes Lime Kiln dust and other non-RCRA regulated waste solids as a reagent to solidify materials to pass the paint filter test that enables them to be disposed of in a permitted landfill.

Treatment Formulation

There are (6) six major steps in the treatment formulation development process:

1. Waste Generation Process Review: The waste generator's process description is reviewed to obtain relevant information.

2. Physical Review: What is the physical form of the waste? Solids might be granular, course or fine, moist, etc. Does the waste contain debris?

3. Waste Code Review: Has the proper waste code been assigned to the waste. What are the treatment standards for that waste code?

4. Chemical Review
   a. Presence of interferences
   b. Target metals present
   c. Concentration of target metals
   d. Chemical matrix of the metal (i.e., hydroxide, carbonate, sulfate, etc.)

5. Trial Bench Test: A calculated waste/reagent ratio mixture is produced based on the above information.

6. Treatment Verification: The sample is subjected to the TCLP method and if required other confirming analysis. Results are examined by the analyst. The waste/reagent ratio is adjusted if necessary and reverified.

Process Description

The general layout of the Stabilization Facility is provided in Figure 4-9.

Wastes are received by roll-off truck, lugger truck, dump trucks, tank truck or other containers and off-loaded into the Steel Bin. An excavator located on a concrete pad scoops up the waste, swivels the bucket to a point above the shredder and drops the material into the top of the shredder if necessary for sizing of the material being stabilized. Partial mixing of secondary reagents may also be provided by the excavator. Any large debris in the bin will be shredded or removed. The shredder reduces the particle size of the waste for more efficient stabilization.

Certain waste and/or debris are treated directly in the steel bin. A receiving roll-off box or dump truck is placed adjacent to the steel bin. The roll-off container or dump truck is utilized to receive waste material and debris that was treated in the steel bin. The primary reagent is delivered to the steel receiving bin via a screw auger from the storage silos. The excavator is utilized both for treatment of the waste (or debris) within the steel bin, and outloading of the treated waste (or debris) into the waiting receiving roll-off box.

Certain wastes must be "size reduced" for proper treatment to occur. The waste is picked up out of the steel receiving bin with an excavator and placed into the shredder. The waste is size reduced by the shredder and discharged back into the steel receiving bin.

Fine particulate waste stored in the waste silo is conveyed to the steel receiving bin using the same screw auger system used to convey the primary reagent from the silos to the steel receiving bin.

Appropriate reagents are added to the waste in the steel receiving bin. The waste, reagents, and water are thoroughly mixed in the steel receiving bin using an excavator. The treated waste is picked up using the excavator and placed into a receiving roll-off box placed adjacent to the steel receiving bin.

Process water, if required, is added directly into the steel receiving bin in a quantity dictated by the treatment formula selected to treat a particular waste. Process water can be provided from either of two sources; Potable city water, and/or on-site generated water (wash water, collected precipitation). Both water sources are delivered to the steel receiving bin using a flexible water hose. The Waste Stabilization Unit operator will select and implement the appropriate water/reagent source.

Steel Bin

The Steel Receiving Bin consists of a steel, open-top tank contained within a concrete pit, and includes view ports for inspection of the space between the steel bin and the concrete pit. The concrete pit provides secondary containment for the steel bin. The bin has a capacity of approximately 40 cubic yards. The dimensions of the bin are 12 feet wide, by 23 feet long, and 4 feet deep. There is no ancillary equipment associated with this bin.

The steel bin is permitted as a tank which is not located in a saturated zone. The tank and floor of the Stabilization building are elevated slightly when compared to the surrounding terrain. The depth to the water table is 5-8 feet below grade. In addition, the steel tank is fixed to the surrounding concrete and has never had an issue with groundwater flow into the tank. Therefore, flotation or dislodgement is not a concern.

The tank is also located near the center of the enclosed Stabilization building which has concrete footings around the perimeter which ensure the tank will not be affected by the frost. Because it is located within an enclosed building and is not located below ground level there is no need to coat the steel to provide additional protection against corrosion. Being located inside also protects the bin from physical damage and stress due to settlement, vibration, expansion and contraction.

The steel bin tank and waste silo are inspected annually by a licensed Professional Engineer. The inspection includes a review of the foundation, structural supports (where applicable), seams, and connections to ensure that are structurally sound and in sound operating condition. If deficiencies are noted, the tank is placed out of service and the appropriate repairs are made.

The steel bin tank was originally constructed with 3/8 inch thick steel plate on the side

walls and ½ inch thick steel plate on the bottom and ends. Repairs that have been made over the past twenty years include reinforcing the tank with additional 3/8 inch thick layers of steel plating on the floor and ½ inch thick steel plating on the sides and ends. Based on past operations, this has proven to be structurally sufficient to withstand the loads placed on the bin by the waste placed inside as well as the impact of the excavator used to mix the waste.

Size Reduction

The shredder consists of carbide steel blades that use a low speed, high torque cutting action for size reduction. The shredder reduces the nominal particle size of the waste material to a uniform consistency.

Waste Silo

Fine particulate waste will be transported to the site in a variety of containers including drums, bulk bags, lugger boxes, roll-off boxes and pneumatic tankers. After initial testing (and consolidation, if necessary), the waste will be offloaded via pneumatic transport into the waste silo. The fill pipe is attached to the waste silo via weld. The dry waste storage silo has a diameter of 11'4" and is constructed of 3/16" mild steel. The total capacity of the silo is 1,470 cubic feet (54.4 cubic yards). The silo is equipped with a high/low level alarm. The waste silo is also equipped with high and low level controls, a shaker baghouse, an aeration jet, a rotary valve flow control, and a flowmeter sensor to control the speed of the vane. The waste silo has been assessed and certified by a licensed Professional Engineer to meet the requirements of s. NR 664.0191, Wis. Adm. Code.

Both the Waste Silo and Reagent Silo are located within the enclosed Stabilization building which has concrete footings around the perimeter which ensure the tank will not be affected by the frost. Being located inside and securely affixed to the concrete foundation also protects the both silos from physical damage and stress due to settlement, vibration, expansion and contraction.

Reagent Silo

This elevated tank with a capacity of 1620 cubic feet (60 cubic yards) is similar in construction to the waste silo. The silo is used to store the primary dry reagent (typically cement kiln dust) for stabilization and to feed it into the mixing process at the required rate. The silo is equipped with level indicators, bin vent filter, flow control valve and flow meter sensor. The bin vent filter is mounted on top of the silo to filter the pneumatic transport air that is discharged.

In addition, a second reagent silo will be located near the stabilization building to supply lime kiln dust to the steel bin when processing non-RCRA regulated waste for solidification for landfill.

Screw Auger

The screw auger delivers the waste and reagent from the silos to the waste receiving bin. The screw auger is designed to handle a maximum of 45 tons per hour of dry free flowing cement at 94 pounds per cubic foot. The auger system consists of two sections. The first screw auger is located under the two silos with rotary feeders that control the product feed rate into the screw auger.

The first screw auger is a 20-inch diameter horizontal screw conveyor: 24’ x 20” diameter screw U-trough with a 7.5 HP motor and drive at 41 RPM and one internal bearing shaft 2-15/16”. This screw auger discharges into the inlet of the second screw auger.

The second screw auger is a 20-inch diameter horizontal screw conveyor: 36’ x 20” diameter screw U-trough with a 10 HP motor and drive at 42 RPM with two internal bearing shafts 3-7/16”, one inlet to match one outlet of the first screw auger and a single outlet. This screw auger discharges the waste and reagent directly into the steel receiving bin.

Secondary Reagent Delivery

Secondary reagents can be either liquid or solids. Delivery of these reagents to the facility will be by truck. Solids will be delivered in 40-50 pound bags or cubic yard bags. Liquids will initially be received in carboys or 55-gallon drums. If large volumes are required, a storage tank will be installed and delivery will be by truck.

Pug Mill

The wastes and reagents must be brought into intimate contact to achieve proper stabilization. This may be accomplished by the use of a pug mill mixer. This continuous rotating shaft mixer provides a high shear blending of wastes and reagents.

Discharge System

The blended wastes and reagents are discharged into an enclosed auger system that transports the mixture directly to the mixing pit.

Dust Control

Dust caused by the processing equipment, and by the nature of the materials being handled, will be minimized by a dust collection system. A baghouse dust collector will filter the particles from the air collected at the bulk receiving bin, the shredder, and auger system. All collected dust will be reintroduced into the waste stabilization process for on-site treatment.

Wash-Down Water

This water will be generated from routine process equipment cleaning which is necessary to prevent build-up of waste residuals. Wash-down water will be accumulated in the process sump. The collected water will be used as make-up water in the treatment process. Solids that accumulate in the sump will be manually removed and reintroduced into the process for treatment.

Secondary Containment and Building

The stabilization facility is enclosed by an engineered metal building (Figure 4-14). The facility is situated on an impermeable pad as shown in Figure 4-13. Joints and cracks are caulked to prevent infiltration through the concrete into underlying soil. The original pad is surrounded by a concrete curb and is sloped to direct liquids to two 3,000 gallon containment sumps. An original slab area grade drawing is presented as Figure 4-13. The floor of the building outside the original containment is sloped towards the two 3,000 gallon sumps, and is surrounded by a curb along the West Wall of the building.

The containment capacity of the original pad and the expanded concrete pad and curbing is adequate to contain all materials that could be released from the waste silo, bulk and

non-bulk containers stored and staged in the unit.

The building itself operates under negative pressure generated by the dust collection system. Make up air will be supplied through louvers in the building walls. The structure has approximate dimensions of 159'4" by 100' with an eve height to 42'. The structure encloses the two storage silos and the truck loading bay.

Accumulation of Treated Waste

Treated waste is analyzed after it has been loaded into roll-off containers or dump trailers to verify that the required chemical and physical properties have been achieved by the treatment process. An accumulation area at the west end of the facility is utilized for the accumulation of 31 roll-off containers and the area directly west of the Stabilization Unit provides for the accumulation of 12 additional roll-off containers. These areas are surrounded with berms and provided blind sumps.

Stabilized loads will be marked with the information necessary for ultimate offsite disposal including:

- Date when the treated waste was placed in the container.
- Notation that the generator of the waste is Veolia – Menomonee Falls.
- Descriptive name and USEPA Hazardous Waste Number of the treated waste.

Non RCRA waste that has been solidified to pass the paint filter test will be transferred directly into a roll-off box or dump trailer for off-site disposal or it will be placed into a transfer pit located within the stabilization building for short term staging until it is transferred into a roll-off box or dump trailer for off-site disposal.

Disposal of Treated Waste

Treated waste will be shipped off-site to a landfill that is licensed and permitted to accept the particular waste stream. In the unlikely event that the treated waste does not achieve the treatment standard (or other required test) the waste will be reprocessed until the treatment standard is achieved. In the unlikely event that the treated waste cannot pass the tests after reasonable reprocessing, the waste generator will be notified, and an appropriate alternate treatment/disposal of the treated waste will be arranged.

Results of the analytical demonstrations will be recorded in operating record at the Veolia – Menomonee Falls facility. An operating log will also contain information that will locate and identify all waste at any time between receipt at Veolia – Menomonee Falls and acceptance at the ultimate off-site disposal facility.

Operation Management

The treatment unit is expected to be operated on a daily schedule, during one, two or three shifts as required by business conditions. Waste of similar types is scheduled for receipt in order to operate efficiently with minimal between-load decontamination.

An operator, trained to run the process, is present whenever treatment is occurring. Computerized instrumentation is used to control the flow of waste, reagents, water, the speed of mixing and the shredding operation. Visual observation is used to monitor waste unloading into the bulk bin. The operator is present throughout the unloading to prevent over-filling. One or more technicians assist the operator by conducting such tasks as directing trucks, and adding secondary reagents, etc.

Daily inspection and maintenance is conducted in the waste stabilization unit. Residual

material is removed by sweeping, scraping and/or washing no less than once every twenty-four hours (when operating). In order to minimize carryover between batches, the stabilization unit is operated until residual material is removed. Visual inspections ascertain when the unit is clean. Wash water generated in maintenance activities is collected and reused in the process or treated in another acceptable manner. An example of the stabilization unit's preventative maintenance schedule is presented in Table 4-13.

For changeovers from characteristic waste to non-RCRA waste, the unit will be RCRA empty prior to the introduction of the non-RCRA regulated waste.

Manual and/or video camera observation ensure that overfilling of the bulk bin and receiving containers does not occur. The quantity of material in the pug mill at any given time is dictated by weight. A computer operated weighing mechanism controls the amount of material fed to the system thereby preventing overfilling. The waste receiving silo is totally enclosed (i.e. no open top). The silo is equipped with a high level alarm that sounds when the preset level is reached.

Should power outages occur, the entire waste stabilization process, including all feed systems will cease operating. Overfilling due to power outages, therefore, will not occur. Waste materials trapped in the process equipment may be manually removed if the operator determines it necessary. Emergency methods of controlling explosions and fires are discussed in the Facility Contingency Plan. Emissions are minimized through the use of appropriate dust collection control at all points of dust generation.

Veolia – Menomonee Falls has installed a boiler to heat water used in the system during periods of cold weather. Radiant heating units are used during cold weather at positions where operators are present. Operational discretion dictates when weather conditions may cause problems such as freezing. In these cases, operations may be discontinued until

weather conditions improve.

All employees working at the waste stabilization facility are responsible for handling secondary reagents. All Veolia – Menomonee Falls employees have received RCRA and Hazardous Materials training. Hazard Communication training is conducted for safe handling of all chemicals associated with the waste stabilization process.

Daily Operating Procedures and the Minimum Freeboard Requirements

The daily operating procedures as identified here only pertains to the stabilization unit. The operating procedure includes precautions taken to ensure compliance with the minimum freeboard requirement of uncovered tanks, s.NR 664.0194(2)(c), Wis. Adm. Code.

Veolia – Menomonee Falls management personnel will create a list of wastes that will make up a process run. The decisions of which wastes will be combined to make a process run will be made from, but not limited to, a review of the following information:

- A review of the waste stabilization formula provided by the on-site Veolia Laboratory. The formula will be reviewed to ensure all wastes to be combined require treatment by a similar formula.

- The waste profile will be reviewed to ensure that the wastes are physically and chemically compatible.

- The waste codes will be reviewed to ensure that numerous listed waste codes will not be combined.

- A review of physical properties of the wastes to be combined. The review attempts to combine wastes that will improve the operation of the stabilization unit. An example of this would be to combine an extremely sticky waste with a granular waste to improve processability.

- The quantities of waste to be combined and processed is reviewed to ensure that at least two feet of freeboard will remain in the bulk receiving bin at all times.

The operations personnel will start the day by removing any precipitation that has accumulated in the secondary containment sumps. The precipitation is pumped into a tanker or other suitable container. Operations personnel next place the waste to be stabilized into the bulk receiving bin.

- The wastes placed into the bulk receiving bin are the wastes identified on the list created by Veolia – Menomonee Falls management personnel.

- These wastes are wastes that have been received on-site that day or removed from a RCRA permitted container storage unit.

- The operations personnel ensure that the bulk receiving bin has a freeboard of at least two feet.

The wastes in the bulk receiving bin will be mixed using the excavator.

- Portland cement and any reagent required by the stabilization recipe are added into the bulk receiving bin.

- The waste and reagent are then mixed using the excavator.

- The operations personnel ensure that the bulk receiving bin always has a freeboard of at least two feet.

Waste that has been stabilized is loaded into roll-off or dump trailers using the excavator. The roll-off boxes or dump trailers, once filled, are moved to the holding areas, sampled, tarped, and labeled.

The roll-off boxes or dump trailers remain in the bermed area until:

- The analysis of the samples indicates the stabilized waste is no longer hazardous. At this time the roll-off box or dump trailer is removed from the bermed area and stored on the Veolia – Menomonee Falls site until it can be landfilled offsite; **OR**

- The analysis indicates that the stabilization has not been effective. The waste remains in the bermed area until a new recipe has been created and the waste is retreated; **OR**

- All wastes remain in the bermed area for a maximum of 90 days. Prior to the waste being in the bermed area for 90 days, it will be removed off-site or placed into a permitted storage unit on-site.

Once all wastes have been stabilized, the stabilization unit is decontaminated as described in the Veolia – Menomonee Falls stabilization decontamination procedure.

Odor Control

It is unlikely that excessive odors will emanate from the facility. However, in the event that facility personnel discover that the material being stabilized generates and objectionable odor, the following actions will he taken:

- Processing of the material will be discontinued;
- The material will then be placed in covered containers;
- The material will he shipped to an alternate facility that is capable of handling the material;
- Notation will be made in that material's waste profile that it generates an objectionable odor and should not be accepted for processing at the Veolia – Menomonee Falls Facility.

Air Emissions

Collecting the particulate emissions through a baghouse controls the particulate emissions from the Stabilization Unit. The Veolia – Menomonee Falls facility received approval of Coverage under Type A Registration Operation permit on November 15, 2011. A copy of the Registration Operation permit and approval letter can be found in Appendix B. The current baghouse has a flow rate of 70,000 CFM. The dust collection system has pick-up points at the steel bin, the shredder, and reagent silos. Filtered air from the baghouse system exits through an external stack that is eight feet high and approximately five and a half feet in diameter.

4.4 Applicability of Subpart CC Air Emissions

Waste Stabilization Unit

Hazardous waste that is subject to Subpart CC air emission standards for tanks or containers will not be accepted for processing in the Waste Stabilization Unit. As part of the approval process, the generator is required to complete a waste information profile of their waste stream. As part of the profile completion, they must declare whether or not their waste is subject to Subpart CC air emission standards per 40 CFR 264.1082(a) and s. NR664.1082. If the material is subject to Subpart CC, the material will be processed at another treatment facility.

Waste Determination

All containers of waste handled in the Container Storage unit, the Drum Repack/Bulking/Decant unit and the Bulk Solid Storage Unit will be handled assuming Subpart CC air emission standards are applicable.

Container Storage

Containers having a design capacity less than or equal to 0.46m^3 will be managed in compliance with the Container Level 1 standards as detailed in 264.1086(c) and s. NR 664.1086(3). Containers having a design capacity greater than 0.46m^3 will be managed in compliance with the Container Level 2 standards as detailed in 264.1086(d) and s. NR 664.1086(4). All hazardous waste will be handled in US DOT specification containers per 49 CFR 178. All containers will be kept closed unless they are being sampled per 264.1086(c)(3)(ii) Level 1 standards or per 264.1086(d)(3)(ii) for Level 2 standards.

Drum Repack/Bulking/Decant Unit

Containers having a design capacity less than or equal to 0.46m^3 will be managed in compliance with the Container Level 1 standards as detailed in 264.1086(c) and s. NR 664.1086(3). All containers will be kept closed at all times unless hazardous waste is being added, per 264.1086(c)(3)(i), or hazardous waste is being removed per 264.1086(c)(3)(ii).

Containers having a design capacity greater than 0.46m^3 will be managed in compliance with the Container Level 2 standards as detailed in 264.1086(d) and s. NR 664.1086(4). All containers will be kept closed at all times unless hazardous waste is being added, per 264.1086(d)(3)(i), or hazardous waste is being removed per 264.1086(d)(2) or being sampled per 264.1086(d)(3)(ii).

All hazardous waste will be handled in US DOT specification containers per 49 CFR 178.

Bulk Solid Storage Unit

Most bulk containers that will be stored in the Southeast Container Storage Unit will not be subject to Subpart CC emission standards. The majority of containers that are stored will not contain material that contains greater than 500 parts per million by weight volatile organic concentration.

Hazardous waste being managed in the Bulk Solid Storage Unit that is subject to the Subpart CC air emission standards will comply with the container level 2 standards as detailed in 264.1086(d)(ii) and s. NR 664.1086(4). These containers will be checked to insure they are operating with no detectable organic emissions per the following procedures.

Procedure for Determining No Detectable Organic Emissions

The following procedures will be adhered to when receiving a container having a design capacity of greater than 0.46 m^3 which is not a US DOT specification container per 49 CFR 178.

1. Upon the material arriving at the facility, the receiving department will flag the container to be tested for any detectable organic emissions.

2. If needed, the waste will be sampled per the facility WAP.

3. After sampling the container will be resealed.

4. The container will then be visually inspected looking closely at the cover and closure devices to check to visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

5. The container will then be tested for any sources of detectable organic emissions in accordance with the procedures specified in 40 CFR 265.1084(d).

    a) The test will be done using a portable Photoionization Detector (PID) as the detection instrument.

    b) The PID will first be calibrated.

    c) The background level will be determined.

    d) Each potential leak inter face will then be checked by traversing the instrument probe around all potential leak interfaces as close to the interface as possible.

    e) The inspection checklist will be completed.

6. If either the visual or emissions tests detected unacceptable conditions, the container (or closure) will be repaired and retested to determine if it meets the no detectable organic emissions requirements.

Detectable Organic Emissions Checklist

DATE: _____

GENERATOR: _____

WIP NUMBER: _____

CONTAINER NUMBER: _____

VISUAL INSPECTION: OK _____ UNACCEPT. _____

ORGANIC EMISSIONS DETECTED (amount): _____

Comments / Repairs Made:

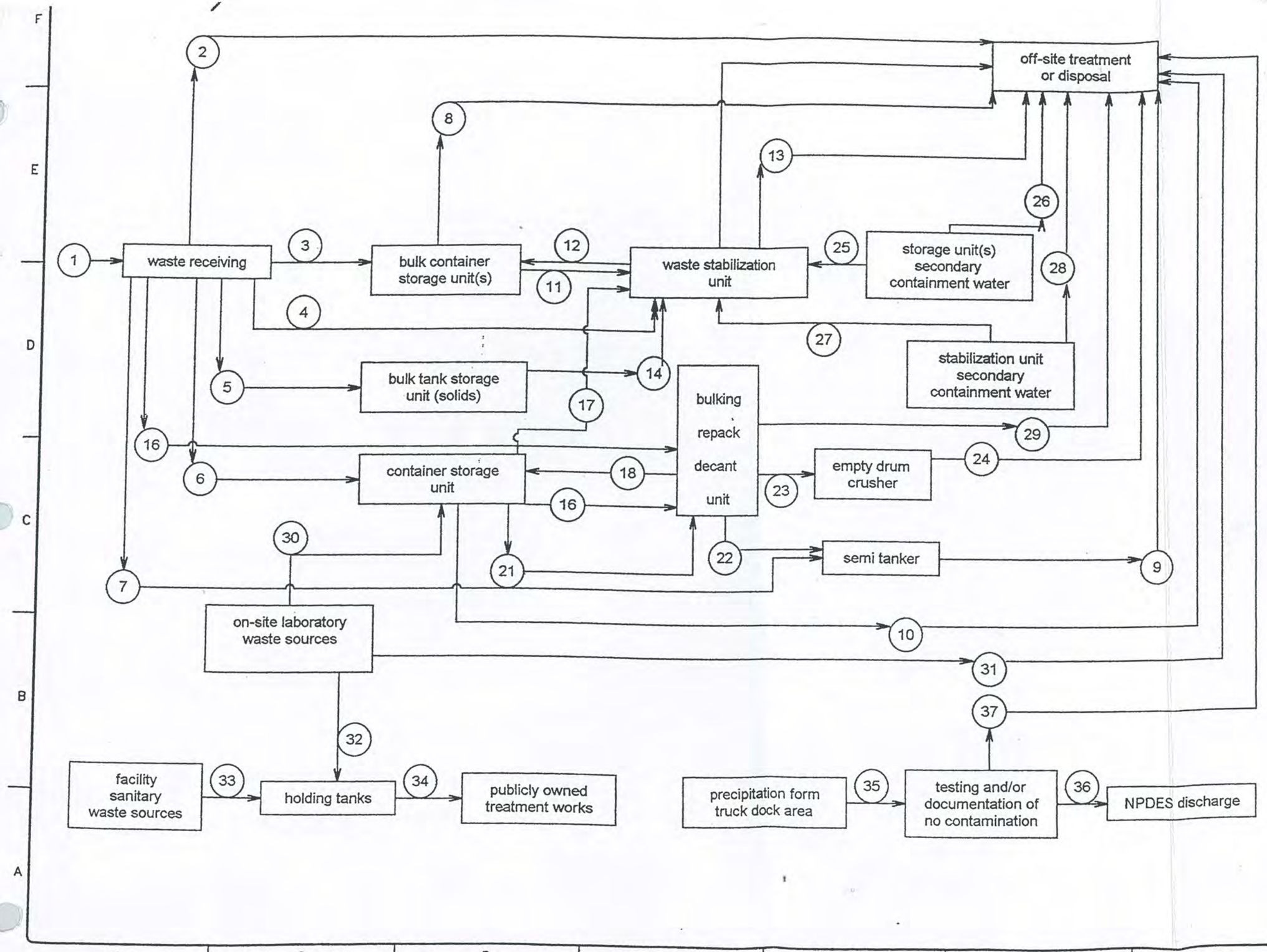
_____

_____

_____

_____

_____



(A) "CONTAINERS" AS USED HERE MEANS PORTABLE VESSELS USED TO HOLD WASTES REGARDLESS OF SIZE. (REF. 40 CFR 260.10)

(B) "BULK" AS USED HERE MEANS PORTABLE VESSELS OF MORE THAN 110 GALLON CAPACITY SUCH AS ROLL-OFF BOX CONTAINERS; AND/OR, LUGGER BOX CONTAINERS; AND/OR, CARGO TANK CONTAINERS; AND/OR, BULKMATIC PNEUMATIC TANK CONTAINERS.

REV. NO.	CODE CIRCLES	DATE	DESCRIPTION	BY APPROVED
	REV. BY		NOTE: CROSS HAIL REVISIONS, IDENTIFY WITH REVISION NUMBER AND ADDITIONAL REVISION SYMBOL CIRCLE AND ADDENDA REVISION NUMBER.	

ISSUE CODE			
A	PRELIMINARY	D	MATL PURC.
B	DESIGN	E	BIDS
C	MATL T.O.	F	CONSTR

SEAL

SIGNATURE

DATE

DR. B. JAMESON	DATE 95/05/02
DSGN. LAU/DAWA	SEC FILE NUMBER
CK.	
DPE WAMELER	JOB NO. M1977
CAD FILE NO. FIG_4-1	

SECDonohue

Veolia ES Technical Solutions
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

DRAWING TITLE

RCRA ACTIVITY FLOW SHEET

CLIENT DRAWING NUMBER

FIGURE 4-1

SEC DRAWING NUMBER

M1977-PF-01

WASTE GROUPS

RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES
1. NON-HALOGENATED SOLVENT WASTES
2. HALOGENATED SOLVENT WASTES
3. EP TOXIC/TCLP WASTES
4. WOOD PRESERVATIVES WASTES
5. INK AND DYE WASTES
6. ORGANIC CHEMICAL MANUFACTURING WASTES
7. PESTICIDE/HERBICIDE WASTES
8. PETROLEUM WASTES

INORGANIC WASTES
9. CORROSIVE WASTES
10. EP TOXIC/TCLP WASTES (METALS)
11. TREATMENT RESIDUALS
12. INORGANIC CHEMICAL MANUFACTURING WASTES
13. METAL FINISHING/TREATING WASTES (NON-REACTIVE)

REACTIVE WASTES
14. REACTIVE WASTES
15. METAL FINISHING WASTES (REACTIVE)

FLOW PATH	1	2	3	4	5	6	7	8
MATERIAL	ALL INCOMING WASTE TRANSPORTS	WASTE IN 10 DAY TRANSFER	BULK SOLID WASTE FOR CONTAINER STORAGE	BULK SOLID WASTE REQUIRING STABILIZATION	BULK SOLID WASTE FOR TANK STORAGE PRIOR TO STABILIZATION	ALL INCOMING CONTAINERIZED WASTE	ALL INCOMING BULK LIQUID WASTE IN SEMI-TANKER	BULK SOLID WASTE TRANSPORTED OFF-SITE
WASTE TYPE	1-15	1-15	1-15	10-15	10-15	1-15	1-9	1-15
FLOW PATH	9	10	11	12	13	14	15	16
MATERIAL	BULK LIQUID WASTE IN SEMI-TANKER	CONTAINERIZED WASTE TRANSPORTED OFF-SITE	BULK SOLID WASTE REQUIRING STABILIZATION	STABILIZED BULK SOLID WASTE PLACED INTO STORAGE	STABILIZED BULK SOLID WASTE TRANSPORTED OFF-SITE	BULK SOLID WASTE REQUIRING STABILIZATION	SOLID WASTE BULKED INTO COMMON CONTAINER REQUIRING STABILIZATION	CONTAINERIZED SOLID WASTE REQUIRING BULKING INTO COMMON CONTAINER
WASTE TYPE	1-9	1-15	10-15	10-15	10-15	10-15	10-15	1-15
FLOW PATH	17	18	19	20	21	22	23	24
MATERIAL	CONTAINERIZED WASTE REQUIRING REPACKAGING	REPACKAGED CONTAINERIZED WASTE RETURNING TO STORAGE	CONTAINERIZED SOLID WASTE REQUIRING BULKING INTO COMMON CONTAINER	CONTAINERIZED LIQUID WASTE CONSOLIDATED FOR CONVEYANCE TO DECANT STATION FOR TRANSFER INTO SEMI-TANKER	CONTAINERIZED LIQUID WASTE REQUIRING CONSOLIDATION INTO SEMI-TANKER	LIQUID WASTE REMOVED FROM CONTAINERS TO BE TRANSFERRED INTO SEMI-TANKER	EMPTY CONTAINERS REQUIRING CRUSHING PRIOR TO OFF-SITE DISPOSAL	CRUSHED EMPTY CONTAINERS TRANSPORTED OFF-SITE FOR DISPOSAL
WASTE TYPE	1-15	1-15	1-15	1-9	1-9	1-9	1-15	1-15
FLOW PATH	25	26	27	28	29	30	31	32
MATERIAL	CONTAMINATED AND/OR UN-CONTAMINATED WATER COLLECTED FROM STORAGE UNIT SECONDARY CONTAINMENT SYSTEM USER AS PROCESS MAKE-UP WATER	CONTAMINATED AND/OR UN-CONTAMINATED WATER COLLECTED FROM STORAGE UNIT SECONDARY CONTAINMENT SYSTEM TRANS-PORTED OFF-SITE	CONTAMINATED AND/OR UN-CONTAMINATED WATER COLLECTED FROM STABILIZA-TION UNIT SECON-DARY CONTAINMENT SYSTEM USED AS PROCESS MAKE-UP WATER	CONTAMINATED AND/OR UN-CONTAMINATED WATER COLLECTED FORM STABILIZA-TION UNIT SECON-DARY CONTAINMENT SYSTEM TRANS-PORTED OFF-SITE	SOLID WASTE BULKED INTO COMMON CON-TAINER REQUIRING TO BE TRANS-PORTED OFF-SITE	GENERAL LAB-ORATORY WASTE CONTAINERIZED FOR STORAGE PRIOR TO OFF-SITE DISPOSAL	LABORATORY PCB WASTE CONTAIN-ERIZED FOR OFF-SITE DISPOSAL	UNCONTAMINATED LABORATORY WASTE WATER COLLECTER IN ON-SITE HOLDING TANKS
WASTE TYPE	10-15	1-15	10-15	10-15	1-15	1-15	NONE	NONE
FLOW PATH	33	34	35	36	37	38	39	40
MATERIAL	FACILITY SANITARY WASTE COLLECTED IN ON-SITE HOLDING TANKS	FACILITY SANITARY WASTE CONFIRMED TO MEET POTW ACCEPTANCE STANDARDS TRANSPORTED VIA TANK TRUCK FOR DISPOSAL	FREE FLOWING PRECIPITATION FROM CONTAINER STORAGE UNIT TRUCK LOADING/ UNLOADING AREA	FREE FLOWING UNCONTAMINATED PRECIPITATION FROM CONTAINER STORAGE UNIT TRUCK LOADING/ UNLOADING AREA DISCHARGED INTO GENERAL FACILITY DRAINAGE	CONTAMINATED PRECIPITATION FROM CONTAINER STORAGE UNIT TRUCK LOADING/ UNLOADING AREA COLLECTED FOR OFF-SITE DISPOSAL	NON-RCRA EMPTY CONTAINERS CONTAINING SOLVENT RESIDUALS TRANSPORTED OFF-SITE FOR DISPOSAL	RESIDUALS GEN-ERATED VIA THE DECANT PROCESS CONTAINERIZED FOR STORAGE PRIOR TO TRANS-PORT OFF-SITE FOR DISPOSAL	SOLIDS BULKED FROM DRUMS PRIOR TO STABILIZATION OR SHIPMENT OFF-SITE FOR DISPOSAL.
WASTE TYPE	NONE	NONE	NONE	NONE	1-15	1-9	1-9	

NOTES

REV. NO.	CODE CIRCLES REV. BY	DATE	DESCRIPTION	SEC APPROVED
			NOTE: CHANGE AS REVISED, EQUIPMENT WITH DIMENSIONS, NUMBERS AND ARRANGEMENTS, ENTRY CIRCLE AND ARROWS DEPICTING VIEW REVISED.	

ISSUE CODE					
A	PRELIMINARY	C	MATL T.O.	F	CONSTN
B	DESIGN	D	MATL PURC.	G	
		E	BIDS	H	

SEAL

SIGNATURE

DATE

DR. B.JAMESON	DATE 05/05/12
DSGN. L.KUYAWA	SEC FILE NUMBER
CK.	
DPE WAMELER	JOB NO. M1977
CAD FILE NO. FIG_4-1A	

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DRAWING TITLE
RCRA ACTIVITY FLOW SHEET

CLIENT DRAWING NUMBER
FIGURE 4-1A

SEC DRAWING NUMBER
M1977-PF-02

N

OFFICE SUPPLY STORAGE

NON-HAZARDOUS WASTE PROCESSING BUILDING

GATE

GATE

GATE

VISITOR/EMPLOYEE PARKING

SANITARY SEWER HOLDING TANK

Bulking/Decant HHW Building

MAINTENANCE BUILDING

CONTAINER STORAGE BUILDING

M.H.

LAB

OFFICE

FENCE

SANITARY SEWER HOLDING TANK

WEIGH SCALE

GATE

FENCE

WASTE STABILIZATION AND STORAGE BUILDING

12 ROLL-OFF/ LUGGER BOXES

12 ROLL-OFF/ LUGGER BOXES

12 ROLL-OFF/ LUGGER BOXES

6 ROLL-OFF/LUGGER BOXES

ROLL-OFF/LUGGER STORAGE UNIT

6 ROLL-OFF/LUGGER BOXES

FACILITY BOUNDARY

GATE

GATE

GATE

11'

ELEC.

Fence

55'

GATE

ACCESS ROAD

0' 40' 80'

SCALE 1"=40'-0"

NOTES

REV. NO.	CODE CIRCLES	DATE	DESCRIPTION	SEC APPROVED
	REV. BY		NOTE: CIRCLE ALL REVISIONS, IDENTIFY WITH DIAMOND, NUMBER AND ARROW. REMOVE ONLY CIRCLE AND ARROW BEFORE NEXT REVISION.	

ISSUE CODE					
A	PRELIMINARY	D	MAT'L PURC.	G	
B	DESIGN	E	BIDS	H	
		C	MAT'L T.O.	F	CONST'N

SEAL

SIGNATURE

DATE

DR.	DATE
DSGN.	SEC FILE NUMBER
CK.	
DPE	JOB NO.
CAD FILE NO.	

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Menomonee Falls, WI 53051

DRAWING TITLE

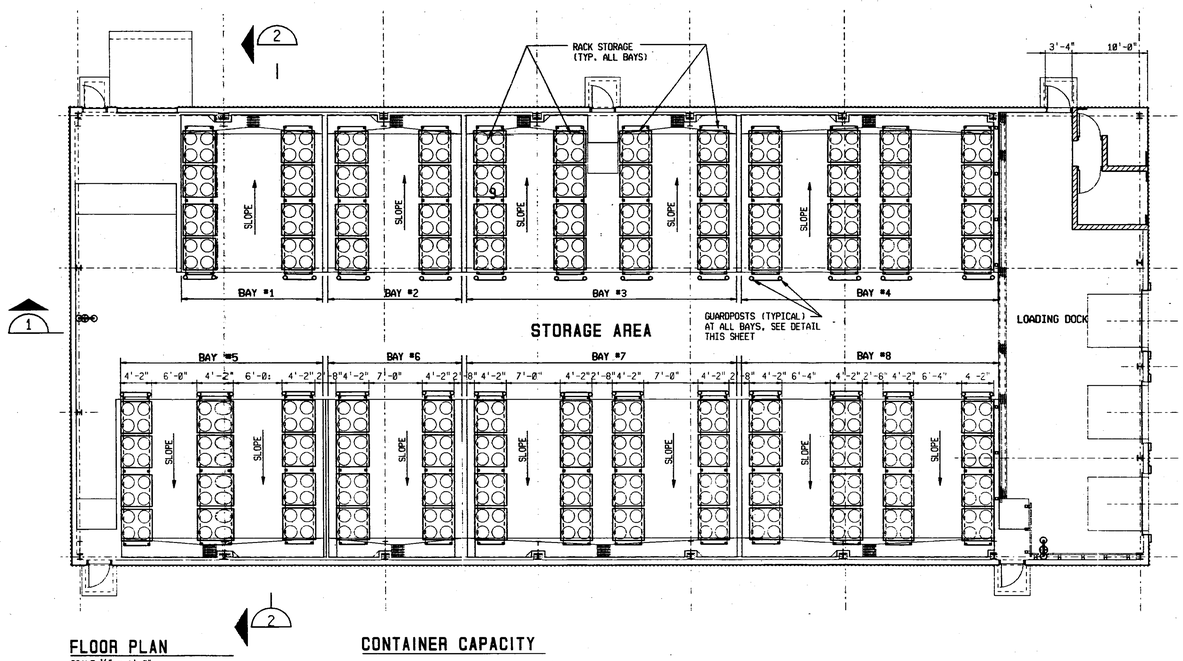
SITE LAYOUT

CLIENT DRAWING NUMBER

Figure 4-2

SEC DRAWING NUMBER

M1977-SL-03

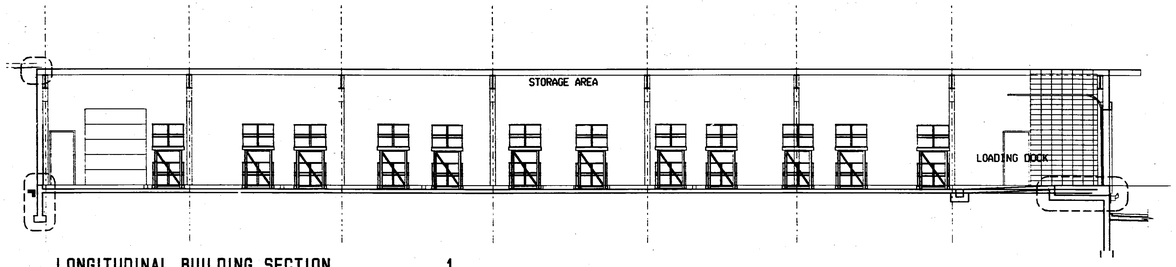


FLOOR PLAN

SCALE 1/8" = 1'-0"

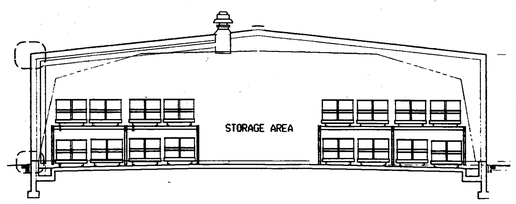
CONTAINER CAPACITY

FLOOR LEVEL	400 CONTAINERS
UPPER RACK	800 CONTAINERS
TOTAL	1200 CONTAINERS



LONGITUDINAL BUILDING SECTION 1

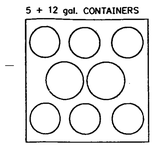
SCALE 1/8" = 1'-0"



TRANSVERSE BUILDING SECTION 2

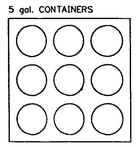
SCALE 1/8" = 1'-0"

ALTERNATE TYPICAL ARRANGEMENTS OF PALLETIZED WASTE STORAGE CONTAINERS FOR LAYOUTS GREATER THAN 4 CONTAINERS PER PALLET INCLUDING BUT NOT LIMITED TO THE FOLLOWING DETAILS.



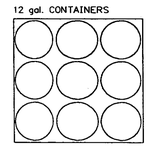
5 + 12 gal. CONTAINERS

SCALE: 1/2"=1'-0"



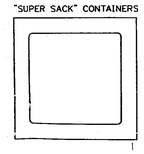
5 gal. CONTAINERS

SCALE: 1/2"=1'-0"



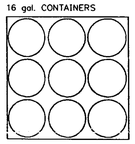
12 gal. CONTAINERS

SCALE: 1/2"=1'-0"



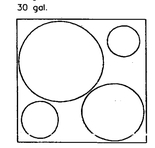
"SUPER SACK" CONTAINERS

SCALE: 1/2"=1'-0"



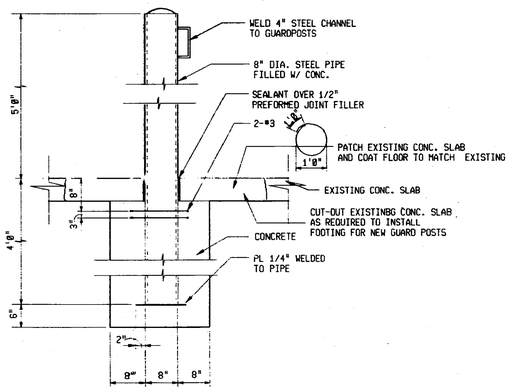
16 gal. CONTAINERS

SCALE: 1/2"=1'-0"



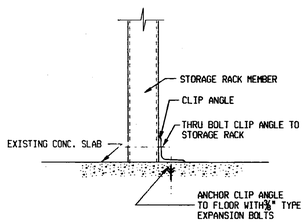
MULTIPLE SIZED CONTAINERS
110 gal.
5 gal.
16 gal.
30 gal.

SCALE: 1/2"=1'-0"



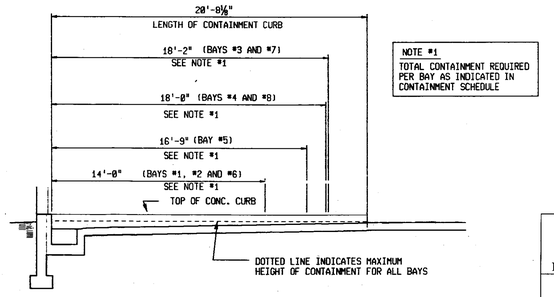
GUARD POST DETAIL

3/4"=1'0"



RACK STORAGE ANCHORAGE

SCALE = NONE



NOTE #1
TOTAL CONTAINMENT REQUIRED PER BAY AS INDICATED IN CONTAINMENT SCHEDULE

SECTION THRU CONTAINMENT AREA

SCALE = NONE

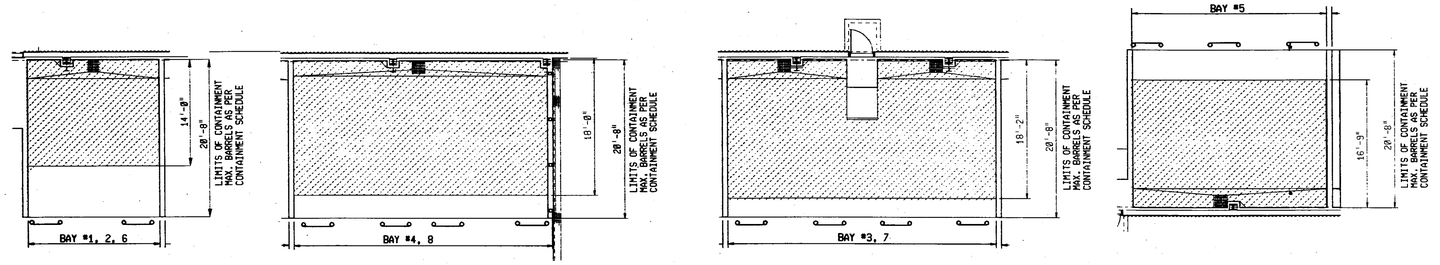
NOTES:

1. THE ABOVE CONFIGURATIONS ARE ONLY EXAMPLES OF PRACTICAL CONFIGURATIONS OF THESE SIZE CONTAINERS AND ARE NOT LIMITED TO THESE EXAMPLES ONLY.
2. ALL CONTAINERS MUST BE ARRANGED TO ALLOW FOR FOR INSPECTION AND SAFE STORAGE.

DRUM STORAGE CONTAINMENT SCHEDULE

Bay Number	Containers Per Bay (55-gallon Equivalence)	Maximum Storage Per Bay (gallons)	Total Containment Available Per Bay (gallons)	Containment Required: 10% of Storage (gallons)
1	96	5280	557	528
2	96	5280	557	528
3	192	10,560	1136	1056
4	192	10,560	1067	1056
5	144	7920	820	792
6	96	5280	557	528
7	192	10,560	1136	1056
8	192	10,560	1067	1056

NOTE:
SHADED AREA INDICATES THE AREA OF CONTAINMENT REQUIRED FOR ACTUAL STORAGE



PARTIAL FLOOR PLANS (EXTENT OF CONTAINMENT FOR PROPOSED STORAGE)

SCALE 1/4" = 1'-0"

FIGURE 4-3

Rev	Date	Description	Dr By	App By

CONTAINER STORAGE

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Donohue
Engineers & Architects

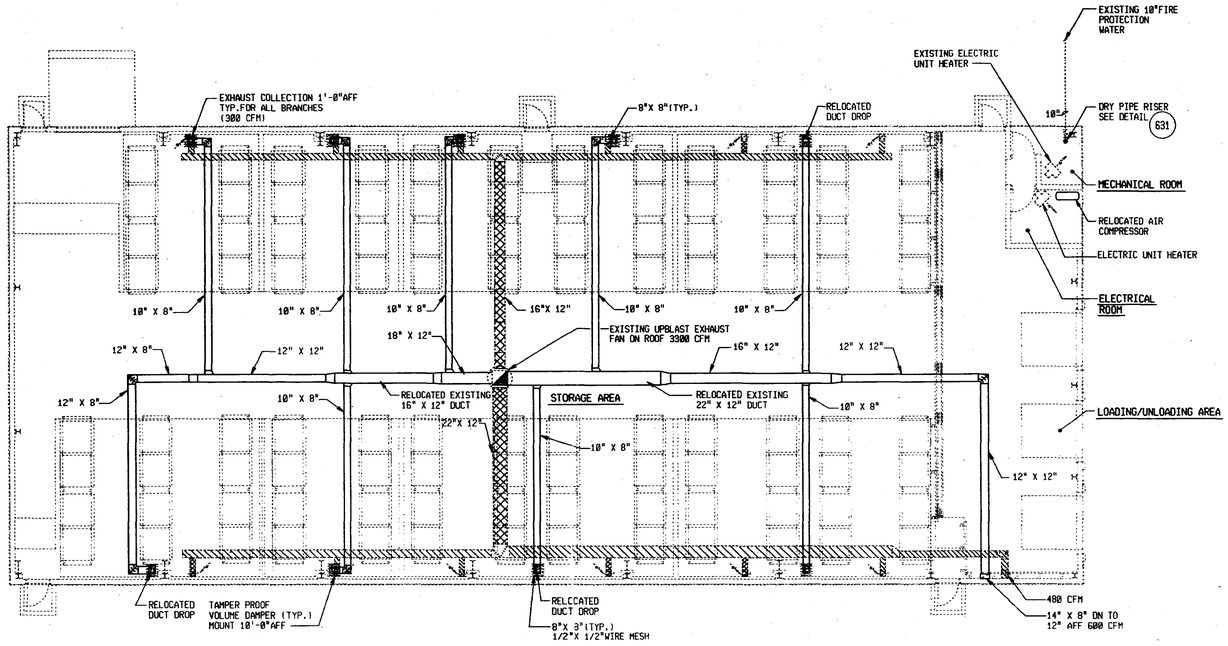
(STACKING LAYOUT)

Designer	FHD	Scale	AS SHOWN	Project No.	16687
Checker		Date	5-19-89	File no.	G-70637
Approver		Drawn By	FHD	Sheet No.	

STACKING FLOOR PLAN AND SECTIONS

S - 1

COMPUTER AIDED DESIGN/DRAFTING



FLOOR PLAN

1/8"=1'-0"

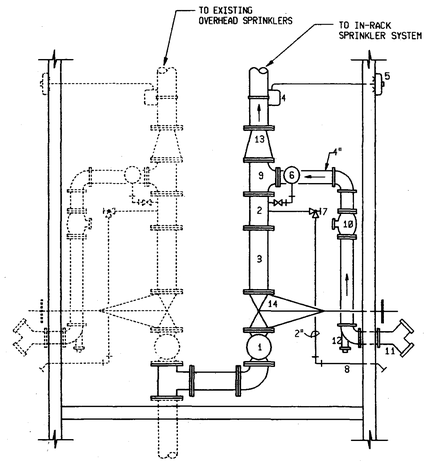
NORTH

HVAC NOTES:

1. DUCTWORK TO BE RELOCATED
2. DUCTWORK TO BE REMOVED
3. REUSE ALL 8" X 8" DUCT DROPS TO FLOOR AS INDICATED.
4. NEW DUCTWORK SOLID.
5. INCREASE FAN CFM TO 3300,RPM-750, TS-4197, INCREASE MOTOR TO ¾HP IF REQUIRED TO MEET NEW FAN CONDITIONS.

GENERAL NOTES:

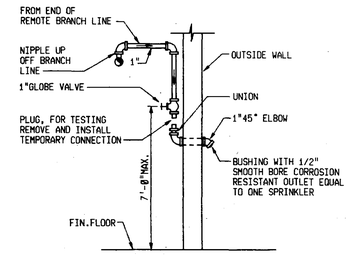
1. BUILDING IS CONSIDERED EXTRA HAZARD GROUP 2.
2. IN-RACK SPRINKLERS TO BE CALCULATED FLOWING SIX SPRINKLERS AT 25 GPM EACH.
3. SPRINKLERS WILL BE INSTALLED IN FRONT AND BACK OF EACH STORAGE RACK.



1. CHECK VALVE
2. TEE CONNECTION
3. RISER FROM MAIN WATER SUPPLY
4. WATER PRESSURE SWITCH
5. ELECTRIC ALARM BELL
6. WATER PRESSURE GAGES (WITH SHUT -OFF COCKS)
7. MAIN DRAIN VALVE
8. MAIN DRAIN LINES TO OUTSIDE OF BLDG. (4'-0" MINIMUM LENGTH INSIDE OF BLDG.)
9. TEE FOR FIRE DERARTMENT CONNECTION
10. CHECK VALVE
11. FIRE DEPARTMENT CONNECTION
12. AUTOMATIC BALL DRIP
13. DRY PIPE VALVE
14. INDICATOR VALVE

CONNECTION DIAGRAM FOR DRY-PIPE ALARM VALVE

N.T.S. 631



INSPECTORS TEST CONNECTION FOR DRY PIPE SPRINKLER SYSTEM

N.T.S. 632

FIGURE 4-4

Rev	Date	Description	Dr By	App By

CONTAINER STORAGE

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

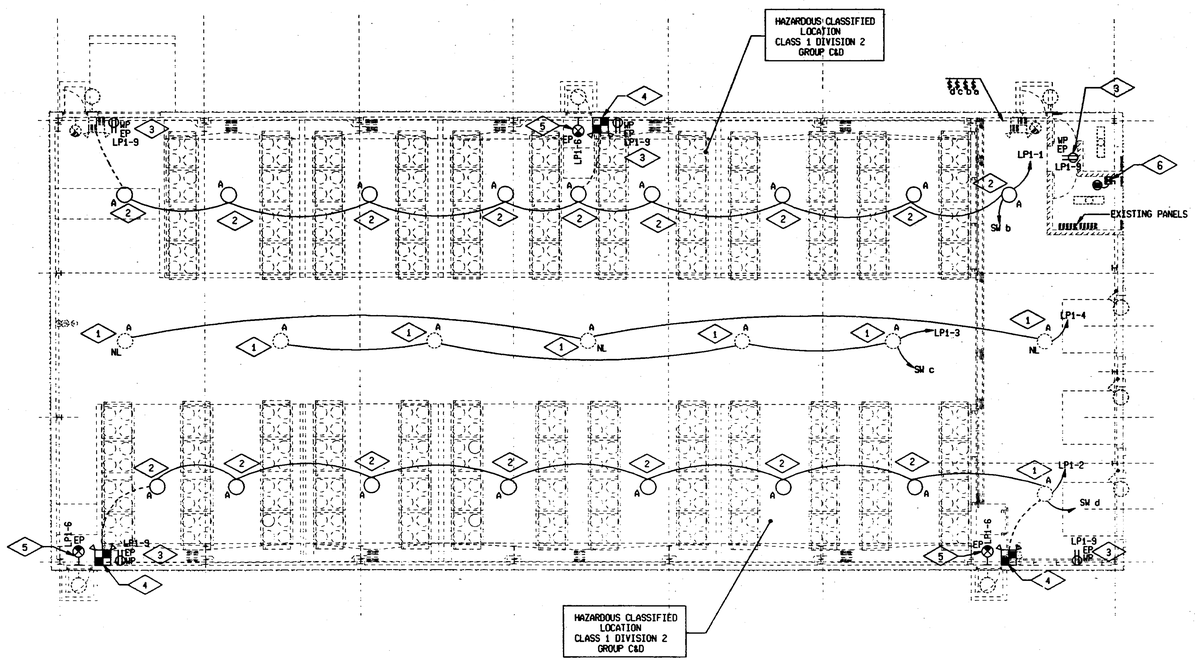
Donohue Engineers & Architects

Designer	WJB/RCD	Scale	AS SHOWN	Project No.	16687
Checker	G.BREITWISCH	Date		File no.	G-70636
Approver	G.BREITWISCH	Drawn By	D.DAMROW	Sheet No.	

PLUMBING, FIRE PROTECTION AND HVAC PLAN AND DETAILS — PH-1

COMPUTER AIDED DESIGN/DRAFTING

3810\PLAN.PLB



FLOOR PLAN

1/8"=1'-0"

PLAN SYMBOLS\ABBREVIATIONS

- FLUORESCENT FIXTURE - SURFACE OR SUSPENDED (LETTER DENOTES TYPE)
- INCANDESCENT OR HID FIXTURE - WALL MOUNTED (LETTER DENOTES TYPE)
- INCANDESCENT OR HID FIXTURE (LETTER DENOTES TYPE)
- CONNECTION TO EQUIPMENT
- THREE PHASE MAGNETIC STARTER
- MOTOR
- EMERGENCY LIGHT
- RECEPTACLE
- EXIT SIGN
- ELECTRICAL PANEL
- HOMERUN CIRCUIT OR CONDUCTORS

ABBREVIATIONS

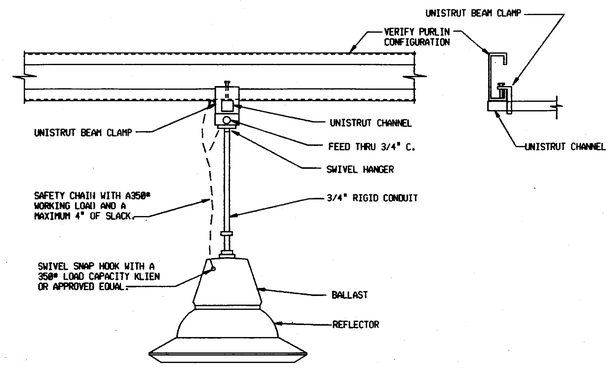
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
DWG	DRAWING
EP	EXPLOSION PROOF
GRD	GROUND
GRS	GALVANIZED RIGID STEEL
HP	HORSEPOWER
LP	LIGHTING PANEL
MTR, M	MOTOR
MTD	MOUNTED
MTG	MOUNTING
NEC	NATIONAL ELECTRICAL CODE
WP	WEATHERPROOF

GENERAL NOTES:

1. CONTRACTOR SHALL PROVIDE GRS CONDUIT IN RATED AREA OF BUILDING IN ACCORDANCE TO NEC. IF GRS CONDUIT EXISTS, CONTRACTOR SHALL VERIFY CONDUIT MEETS NEC STANDARDS. CONTRACTOR SHALL REPLACE AND CORRECT ANY CONDUIT THAT DOES NOT MEET NEC STANDARDS.
2. FIXTURE TYPE "A" , 21 EXISTING FIXTURES. PROVIDE AN ADDITIONAL 3 FIXTURES. FIXTURE TYPE "A" IS HUBBEL LOWBAY HPS UNIT NO. HLP-150SB-AR-CFB\RAINSHIELD. VERIFY EXISTING FIXTURE AND SUPPLY SAME.
3. CLASS 1, DIVISION 2 - GROUP C&D. THIS TYPE OF CLASSIFICATION SHALL EXTEND AROUND ANY CONTAINER IN AN AREA DEFINED BY A 5' RADIAL SPHERICAL SWEEP.

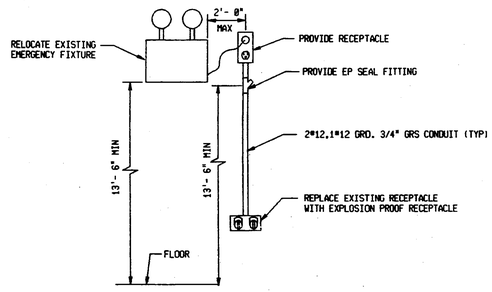
PLAN NOTES:

1. EXISTING FIXTURES ARE TO REMAIN AT CURRENT LOCATIONS. CLEAN, TEST, AND RELAMP FIXTURES.
2. RELOCATE AND REWIRE EXISTING FIXTURES AND PROVIDE ADDITIONAL FIXTURES AS REQUIRED SEE GENERAL NOTE #2. MOUNT 13'6" AFF, NO FIXTURE SHALL EXTEND BELOW 13'6" AFF. SEE DETAIL 904G
3. REMOVE EXISTING RECEPTACLES AND REPLACE WITH EP AND WP RECEPTACLES.
4. EXISTING EMERGENCY LIGHTS ARE TO BE RELOCATED TO A MOUNTING HEIGHT OF 13'6" AFF. NO PART OF EMERGENCY LIGHT SHALL EXTEND BELOW 13'6" AFF. CLEAN, TEST, AND RELAMP. SEE DETAIL 915A
5. REMOVE EXISTING EXIT SIGNS AND REPLACE WITH EP EXIT SIGNS.
6. NEW COMPRESSOR LOCATION. RELOCATE AND EXTEND CONDUIT AND WIRE TO COMPRESSOR MOTOR STARTER NEW LOCATION.



FIXTURE TYPE "A" MOUNTING DETAIL 904G

NTS



EMERGENCY FIXTURE MOUNTING DETAIL 915A

NTS

FIGURE 4-5

Rev	Date	Description	Dr By	App By

CONTAINER STORAGE

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

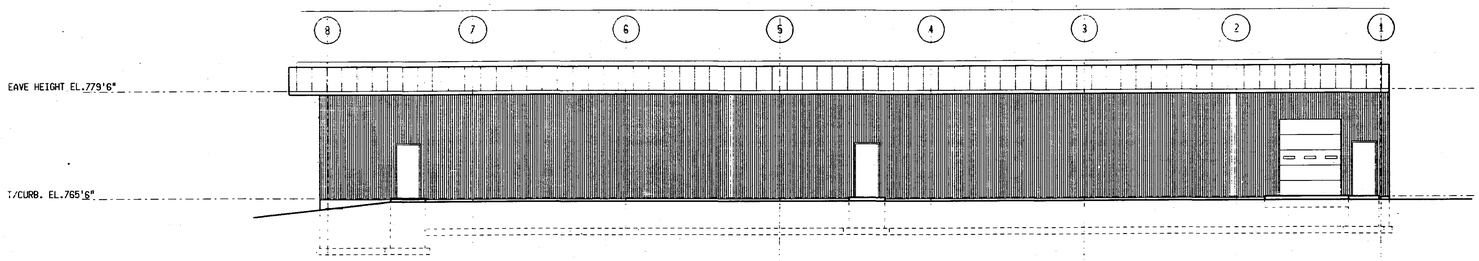
Donohue Engineers & Architects

Designer	JAB	Scale	AS SHOWN	Project No.	16687
Checker	DRT	Date	5-19-89	File no.	G-70635
Approver	DJS	Drawn By	JAB	Sheet No.	E-1

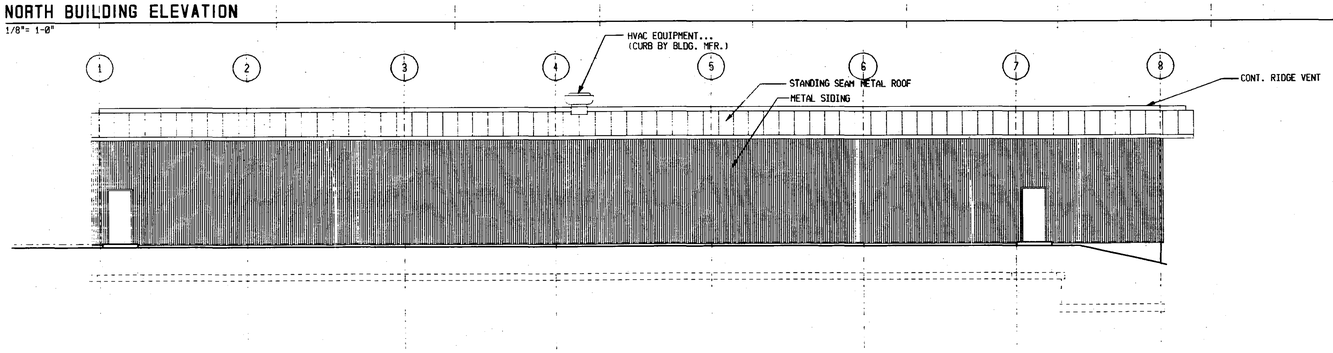
LIGHTING AND POWER PLAN

WISCONSIN KARL E. HANSON 5-26-89 REGISTERED ARCHITECT

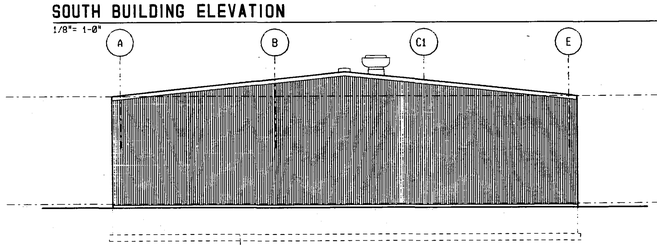
DS3:E213027JSTACK.ELC COMPUTER AIDED DESIGN/DRAFTING
PRF=ELCSTACK

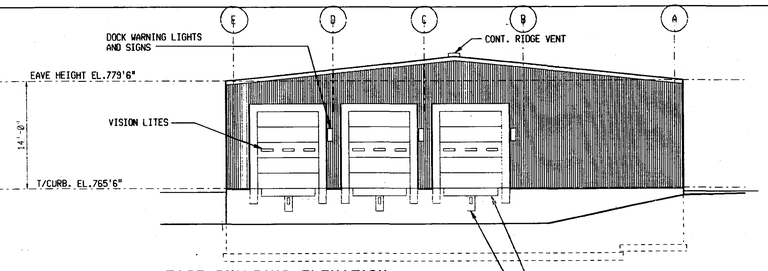


NORTH BUILDING ELEVATION
1/8"= 1-0"



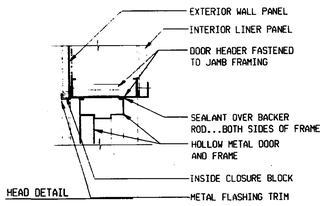
SOUTH BUILDING ELEVATION
1/8"= 1-0"



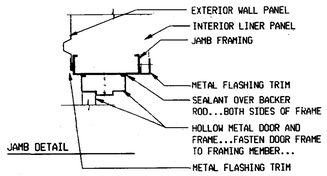


EAST BUILDING ELEVATION
1/8"= 1-0"

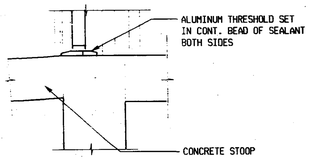
WEST BUILDING ELEVATION
1/8"= 1-0"



HEAD DETAIL

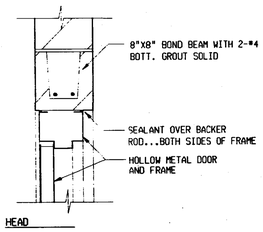


JAMB DETAIL

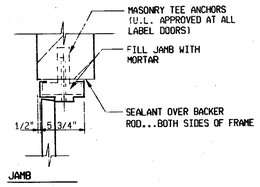


SILL DETAIL

EXTERIOR DOOR DETAILS 2
1 1/2"=1'0"

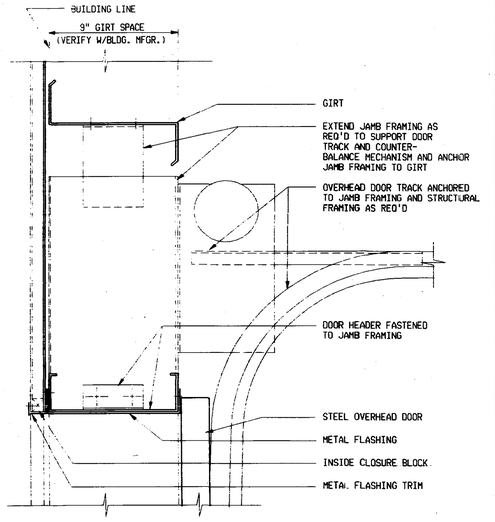


HEAD

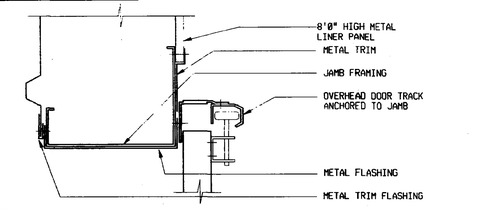


JAMB

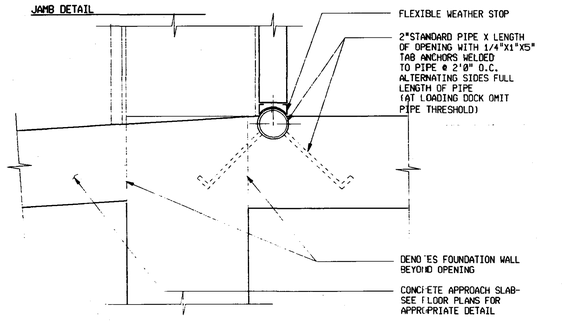
INTERIOR DOOR DETAILS 3
1 1/2"=1'0"



HEAD DETAIL



JAMB DETAIL



SILL DETAIL

OVERHEAD DOOR DETAIL (DOOR ON NORTH ELEVATION SHOWN) 1
3"=1'0"

FIGURE 4-6

2 /88
MONTH/YEAR
REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR
BY Paul Sanders
DONOHUE & ASSOCIATES, INC.

Rev	Date	Description	Dr By	App By
1	10/23/87	REMOVE COVERED LOADING/UNLOADING AREA	LLN	RAC

DRUM STORAGE FACILITY

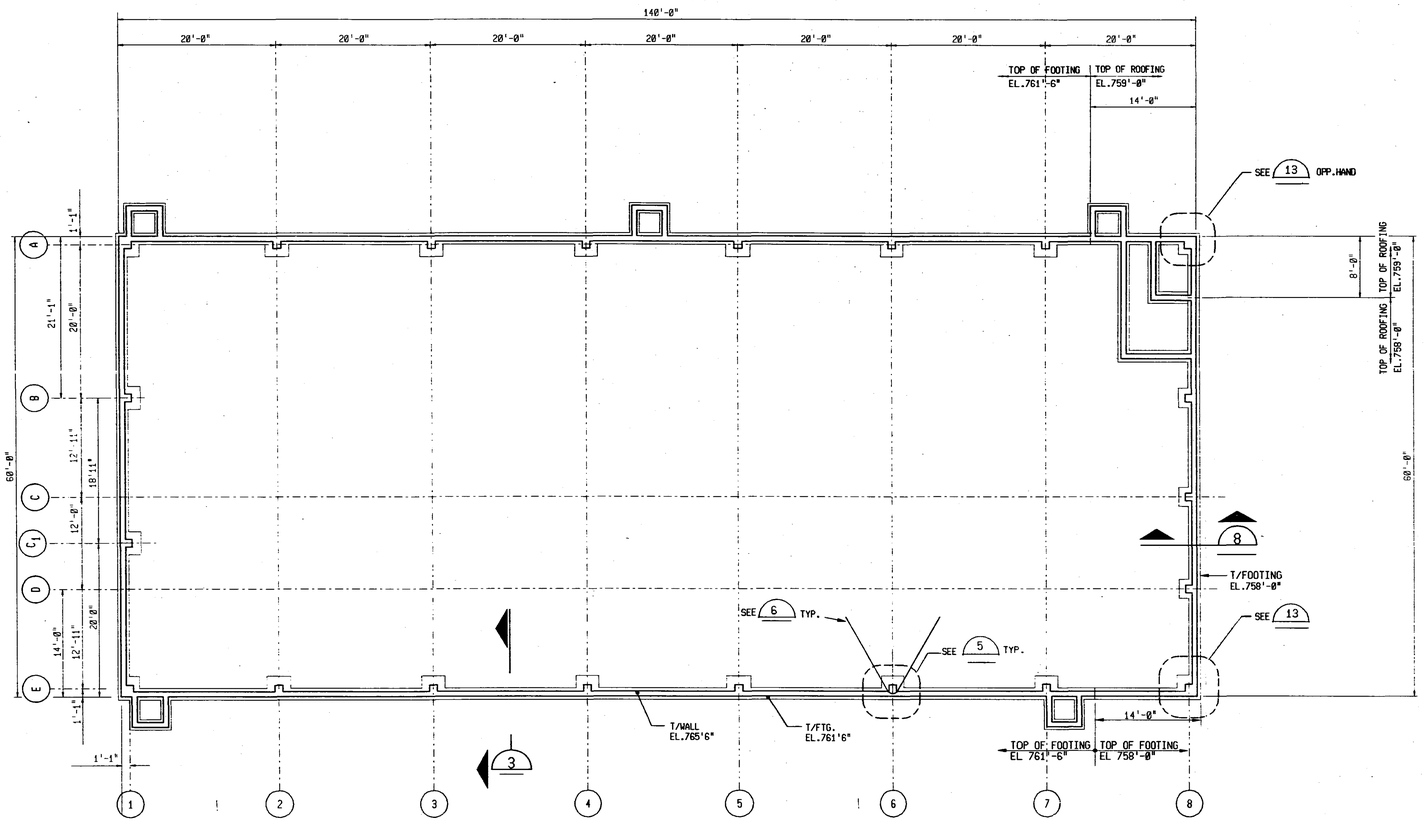
Donohue Engineers & Architects

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

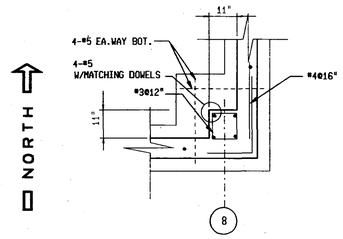
Designer	GAG	Scale	AS NOTED	Project No.	15593
Checker	FPK	Date	OCT. 15,1987	File no.	G-42165
Approver	KEH	Drawn By	GAG	Sheet No.	AS-3

BUILDING ELEVATIONS AND DETAILS

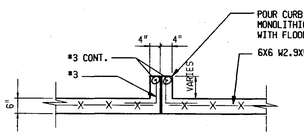
COMPUTER AIDED DESIGN/DRAFTING
D56\213,0103ELV.ARC



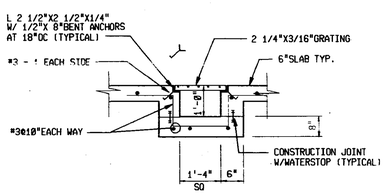
FOUNDATION PLAN
1/8"= 1-0"



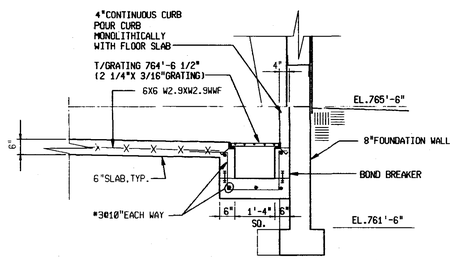
DETAIL 13
1/2"= 1-0"



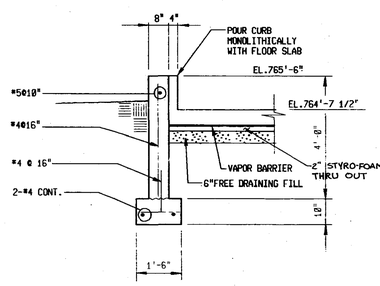
CONTROL JOINT DETAIL 9
1/2"=1'-0"
AS-2



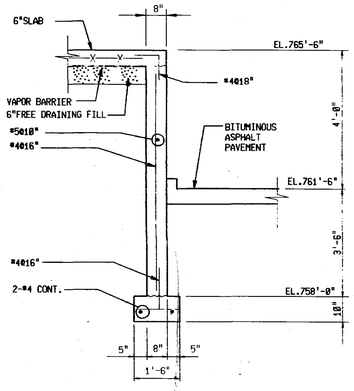
SUMP DETAIL 1
1/2"=1'-0"
AS-2



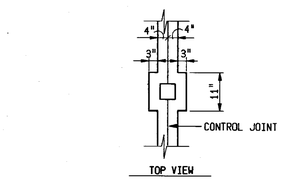
SUMP SECTION 2
1/2"=1'-0"
AS-2



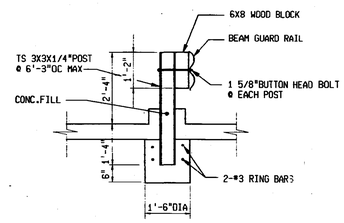
SECTION 3
1/2"=1'-0"



SECTION 8
1/2"=1'-0"

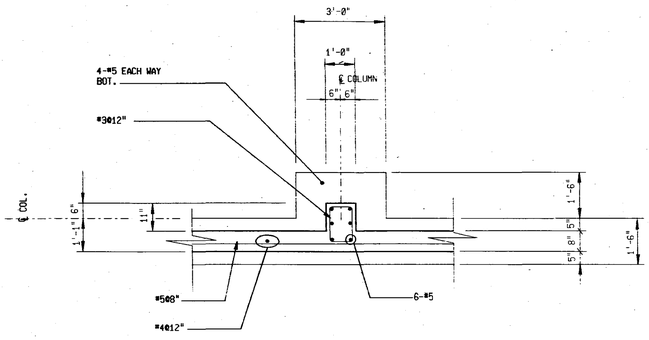


TOP VIEW

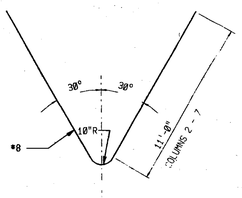


SECTION

GUARD RAIL DETAIL 7
1/2"=1'-0"
AS-2



DETAIL 5
1/2"=1'-0"



HAIR PIN DETAIL 6
1/4"=1'-0"

FIGURE 4-7

Rev	Date	Description	Dr By	App By
1	10/23/87	REMOVE COVERED LOADING/UNLOADING AREA	LLN	RAC

DRUM STORAGE FACILITY

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Donohue
Engineers & Architects

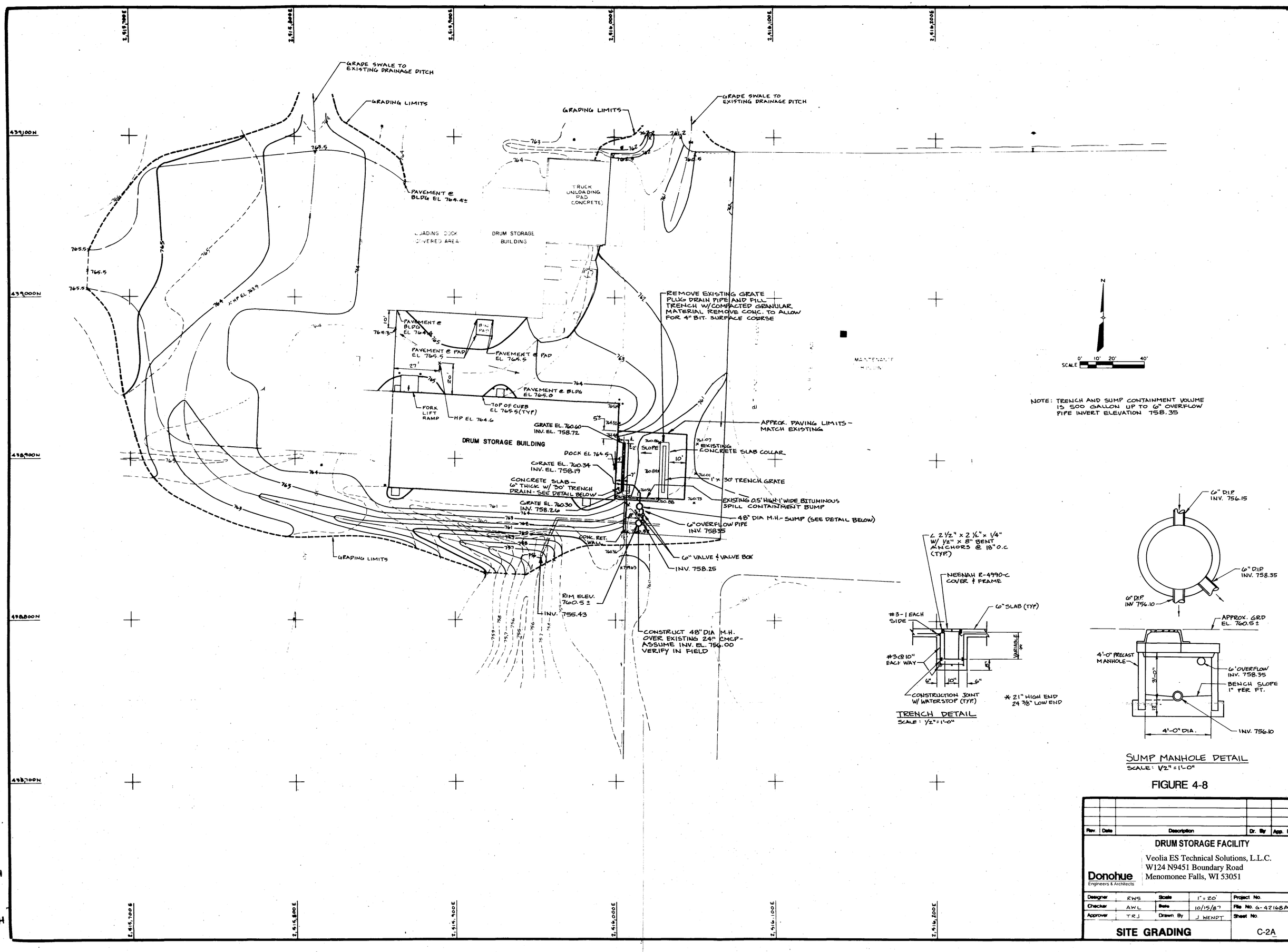
Designer	LLN	Scale	AS SHOWN	Project No.	15593
Checker		Date	OCT. 15,1987	File no.	G-42167
Approver		Drawn By	VEN	Sheet No.	

FOUNDATION PLAN AND DETAILS — AS-1

WISCONSIN — PAUL E. LEBERT — E-16118 — SHEBOYGAN, WISCONSIN — PROFESSIONAL ENGINEER

2 / 88
MONTH / YEAR
REVISED TO CONFORM TO CONSTRUCTION RECORDS PROVIDED BY CONTRACTOR
BY: Paul Sanders
DONOHUE & ASSOCIATES, INC.

COMPUTER AIDED DESIGN/DRAFTING
DSG:I213.0101 FDN1.STG



NOTE: TRENCH AND SUMP CONTAINMENT VOLUME IS 500 GALLON UP TO 6" OVERFLOW PIPE INVERT ELEVATION 758.35

TRENCH DETAIL
SCALE: 1/2"=1'-0"

* 21" HIGH END 24 3/8" LOW END

SUMP MANHOLE DETAIL
SCALE: 1/2"=1'-0"

FIGURE 4-8

Rev.	Date	Description	Dr. By	App. By

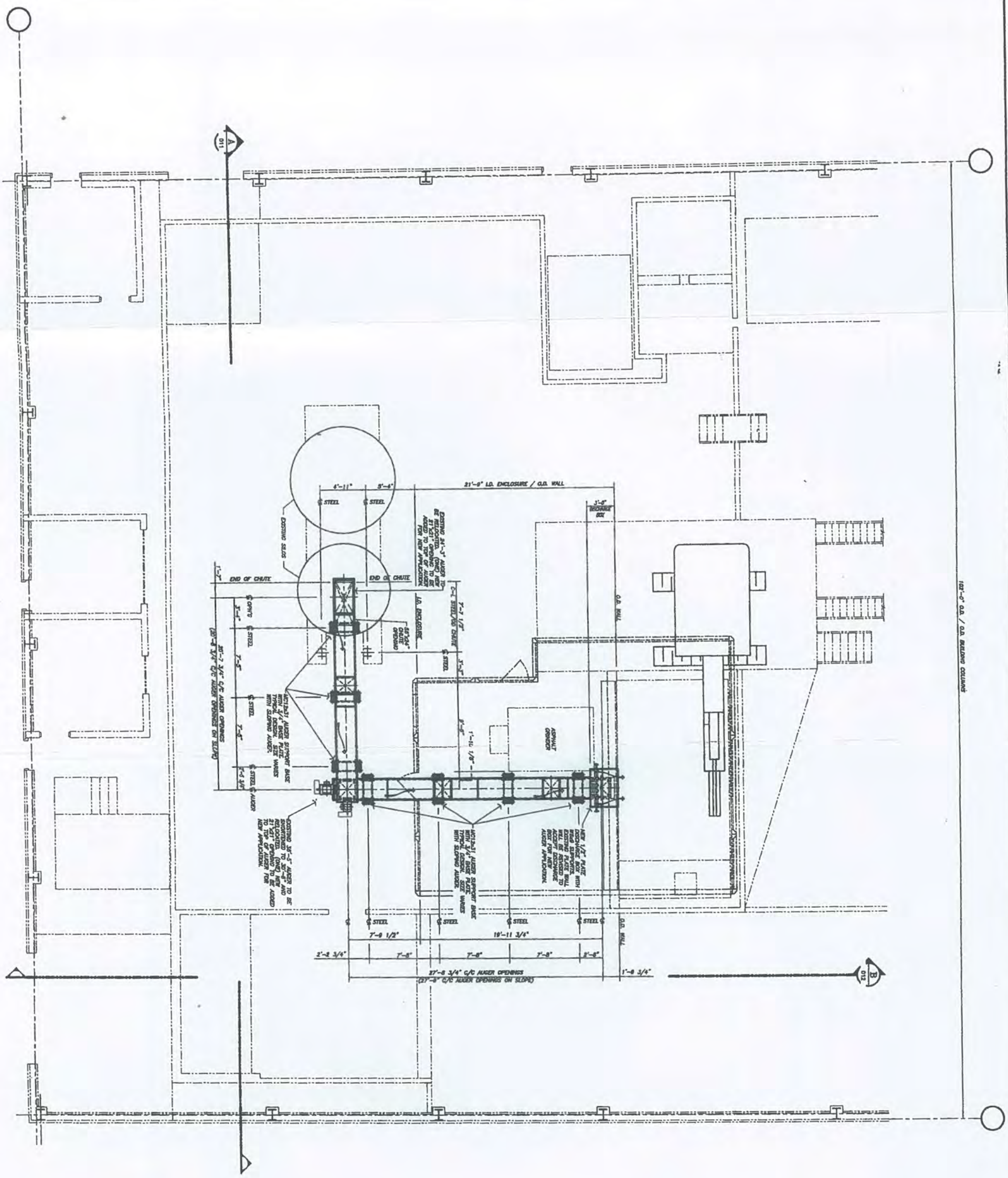
DRUM STORAGE FACILITY

Donohue Engineers & Architects

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Designer	RWS	Scale	1" = 20'	Project No.	
Checker	AWL	Date	10/15/87	File No.	G-42168A
Approver	TRJ	Drawn By	J WENDT	Sheet No.	

SITE GRADING C-2A



PLAN VIEW CONVEYOR RENOVATION – NEW EQUIPMENT LAYOUT
SCALE: 1/4" = 1'-0"

FIG. 4-9

DRAWING NUMBER:	010-0
FILE NAME:	
DRAWN BY / CHECKED BY:	ASD
SCALE:	1/4" = 1'-0"
DATE:	032603
PROJECT NO.:	

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

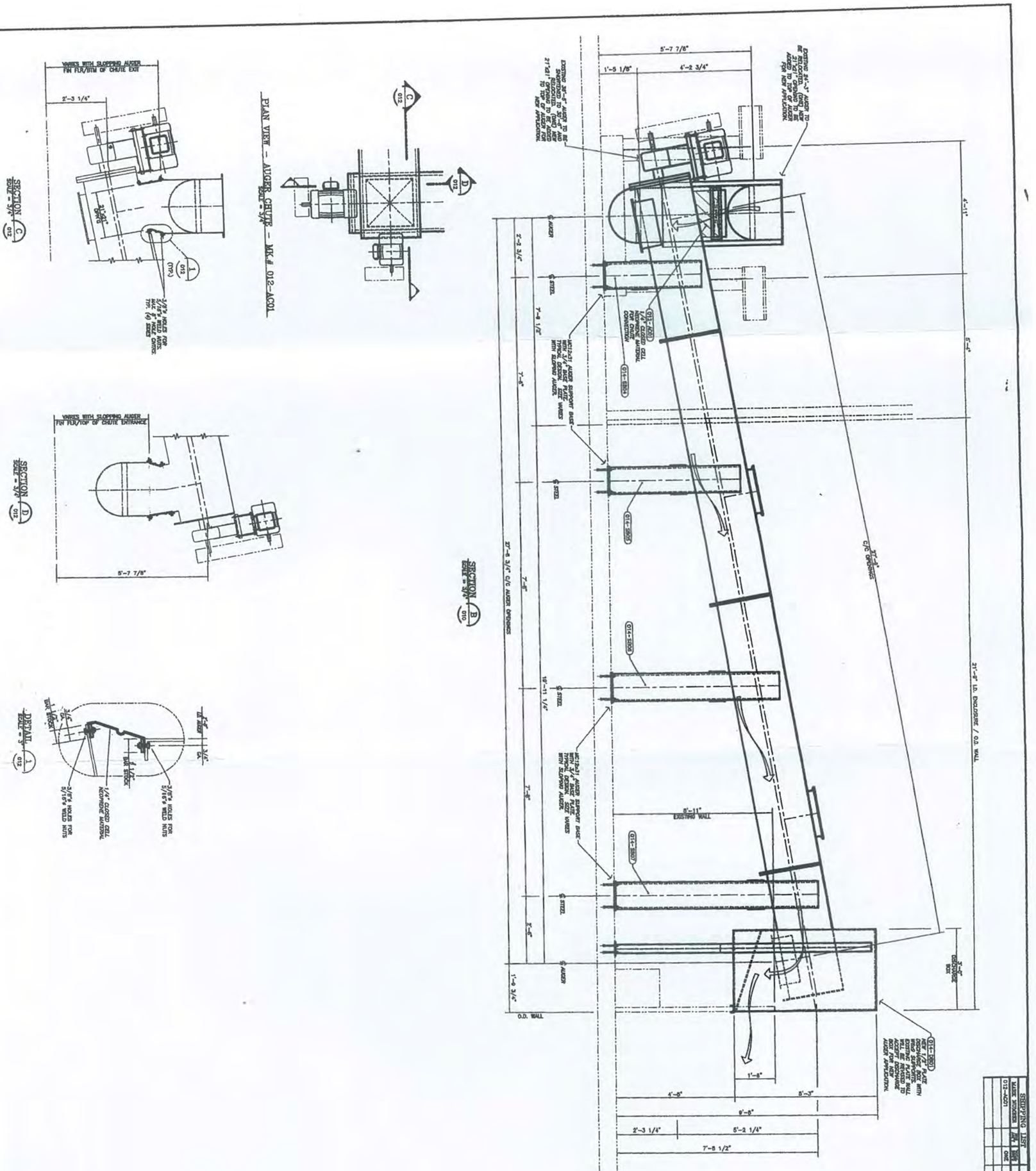
PLAN VIEW – NEW EQUIPMENT LAYOUT

HKM
H. KUBENIK MECHANICAL, INC.
MENOMONEE, WISCONSIN

H. KUBENIK MECHANICAL, INC.
2101 S. 27th STREET
MILWAUKEE, WI 53215
TELEPHONE: (414) 385-3030
FAX: (414) 385-4966

REVISIONS

NO.	DATE	BY	DESCRIPTION



SEQUENCE	PART	QTY	MATERIAL	DESCRIPTION
012-AC01	MARK NUMBER	DWG		SIZE / DESCRIPTION
				AUGER CHUTE - FROM AUGER TO AUGER
				-
				-

FIG. 4-10

PROJECT NO.:	032203
DATE:	
SCALE:	3/4" = 1'-0"
DRAWN BY:	ASD
CHECKED BY:	
FILE NAME:	
DRAWING NUMBER:	012-0

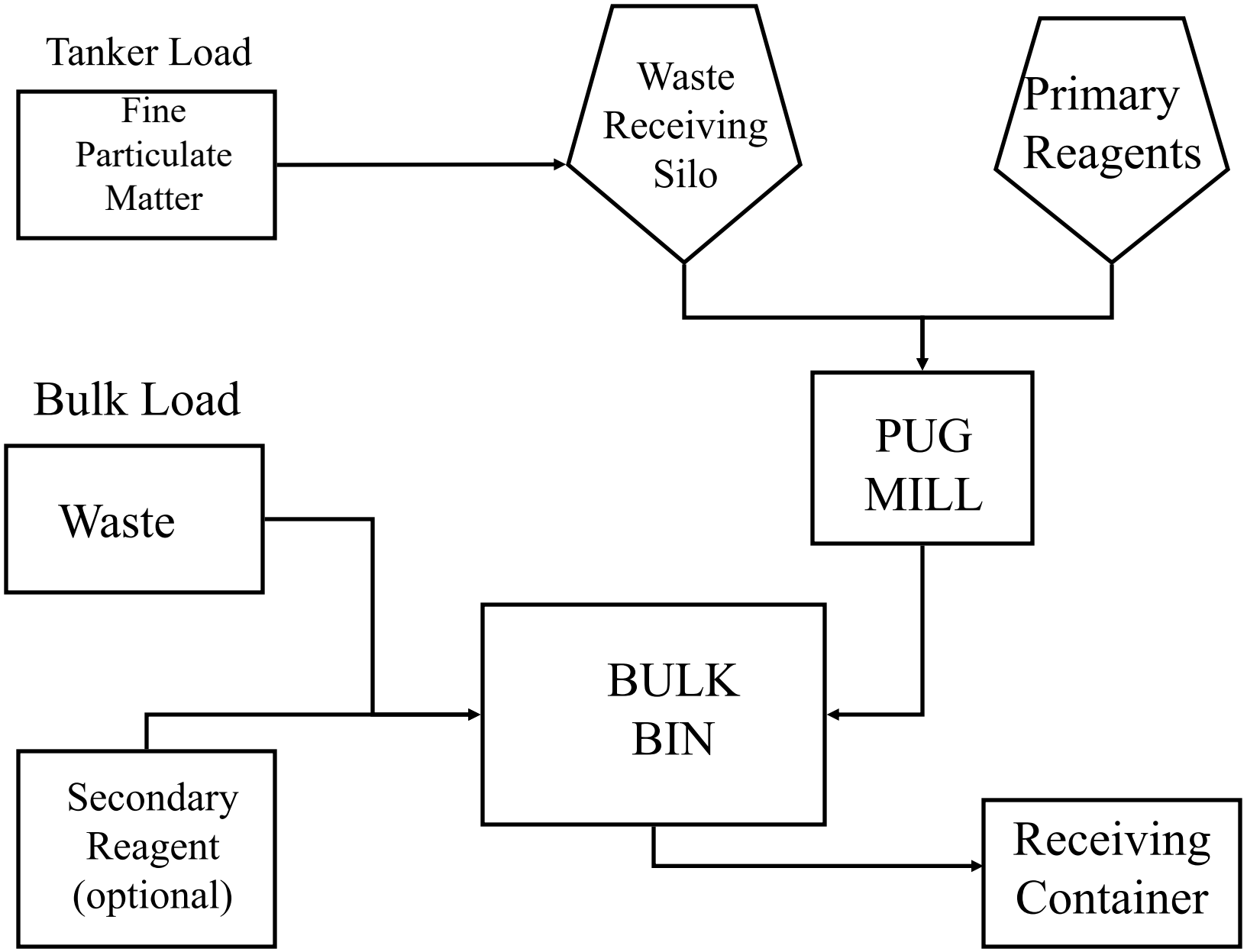
Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

NEW EQUIPMENT – SECTION VIEW

H. KUHENUK MECHANICAL, INC.
KEWAUNEE, WISCONSIN

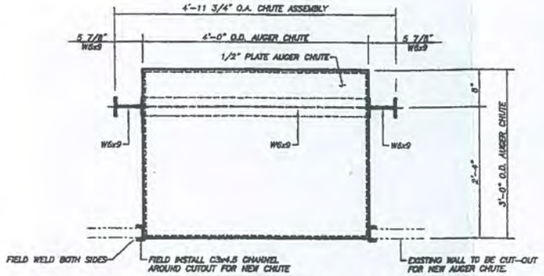
H. KUHENUK MECHANICAL, INC.
2101 S. 9TH STREET
MANITOWOC, WI 54220
TELEPHONE (414) 305-0556
FAX (414) 305-0559

REVISIONS			
NO.	DATE	BY	DESCRIPTION

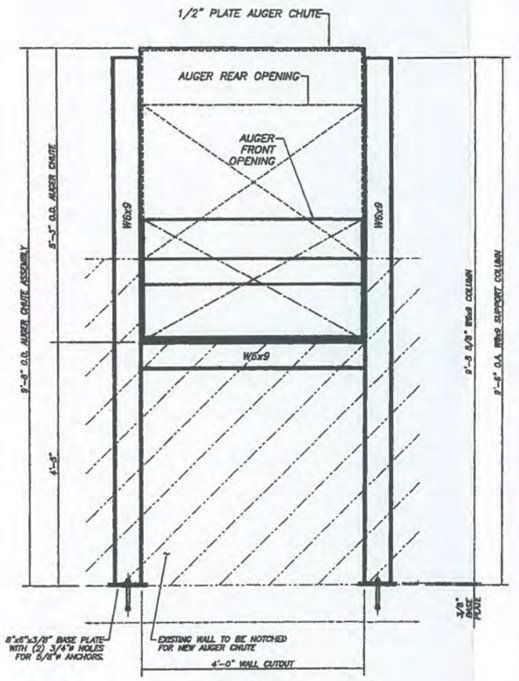


FLOW DIAGRAM

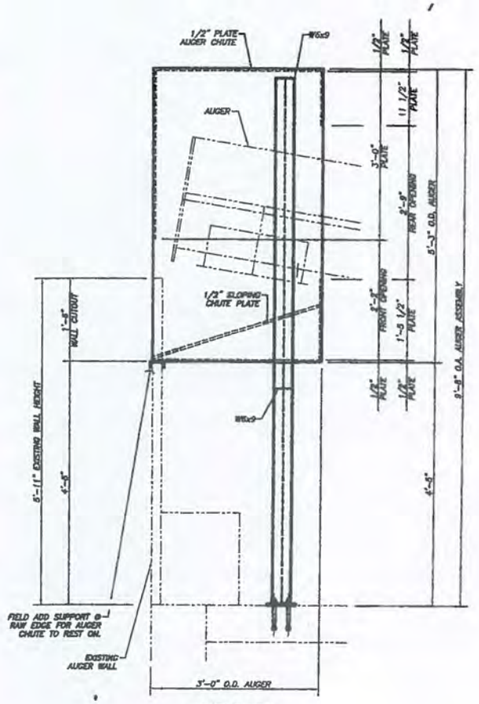
Figure 4-11



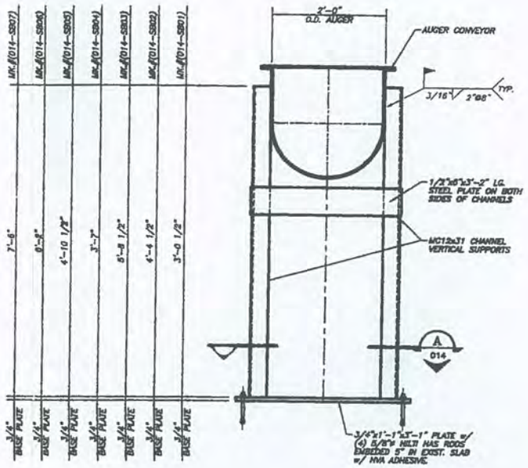
AUGER DISCHARGE BOX ASSEMBLY DETAIL – MK.# 014-DB01
SCALE = 1"

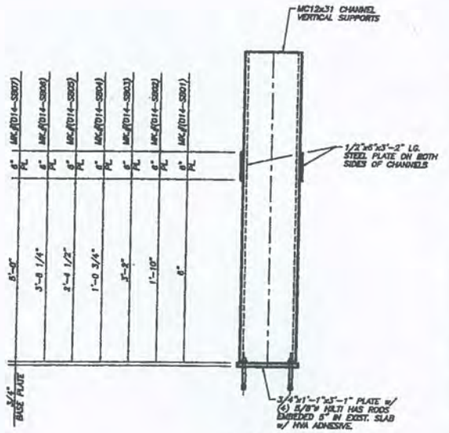


ELEVATION
SCALE = 1"



END VIEW
SCALE = 1"





END VIEW
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB01
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB02
SCALE = NONE

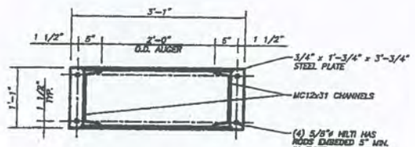
SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB03
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB04
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB05
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB06
SCALE = NONE

SUPPORT BASE ASSEMBLY DETAIL – MK.# 014-SB07
SCALE = NONE



SECTION A
SCALE = 1"
SUPPORT BASE PLATE DETAIL

SHIPPING LIST			DESCRIPTION		LENGTH	
MARK NUMBER	QTY.	UNIT	MATERIAL	SIZE / DESCRIPTION	FEET	INCHES
014-DB01		ONE	1/2" PLATE	AUGER DISCHARGE BOX DETAIL	-	-
014-SB01		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB02		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB03		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB04		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB05		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB06		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-
014-SB07		ONE	ASTM-A36	AUGER SUPPORT BASE –	-	-

FIG. 4-12

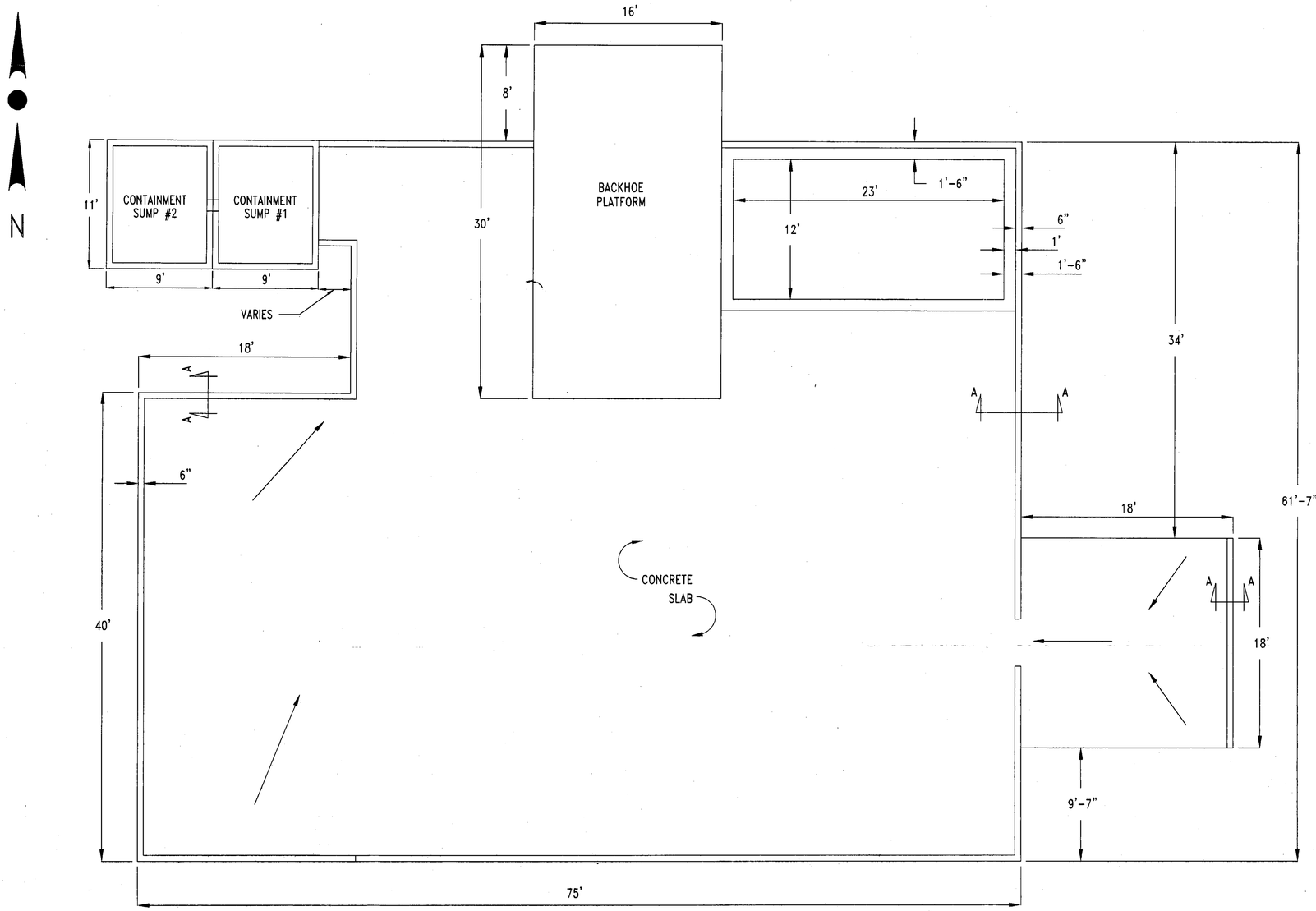
REVISIONS			
NO.	DATE	BY	DESCRIPTION

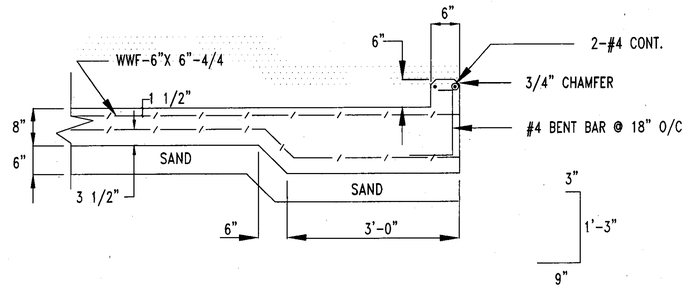
H. KUDRONIK MECHANICAL, INC.
HKM
H. KUDRONIK MECHANICAL, INC.
GREENVILLE, WISCONSIN
H. KUDRONIK MECHANICAL, INC.
6116 N. 27th STREET
MILWAUKEE, WI 53209
TELEPHONE (414) 355-5800
FAX (414) 355-5900

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

NEW EQUIPMENT – AUGER SUPPORT DETAILS

PROJECT NO.:
DATE: 032903
SCALE: 1" = 1'-0"
DRAWN BY / CHECKED BY: ASD
FILE NAME:
DRAWING NUMBER: 014-0





NOTE: THICKENED SLAB @ EDGE TYPICAL @ PERIMETER.

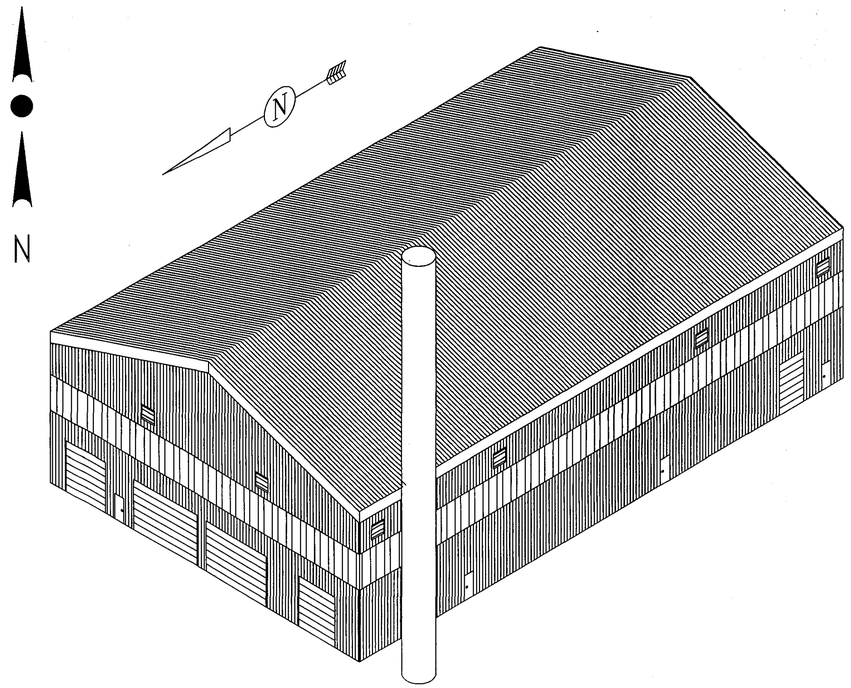
A-A SECTION THROUGH CONCRETE PAVEMENT

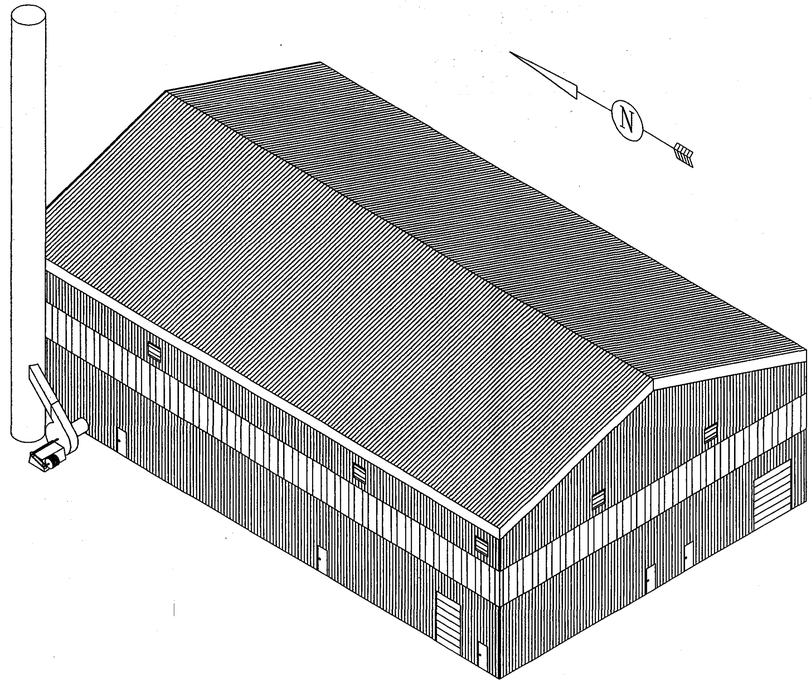
NOTE: EXISTING CONCRETE IS SLOPED TO THE CONTAINMENT SUMP. ALL NEW CONCRETE SURFACES WITH THE EXCEPTION OF THE BACKHOE PLATFORM TO BE SLOPED INTO THE EXISTING CONTAINMENT SYSTEM.

CONCRETE SLAB STABILIZATION FACILITY

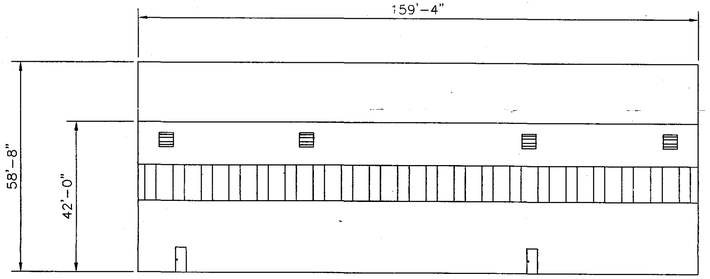
FIG. 4-13

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

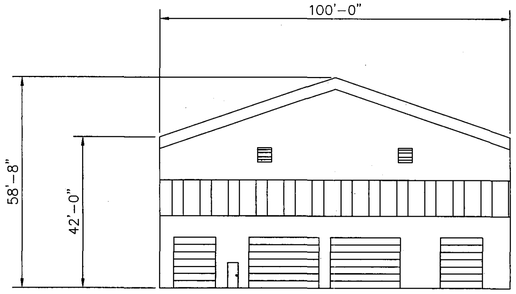




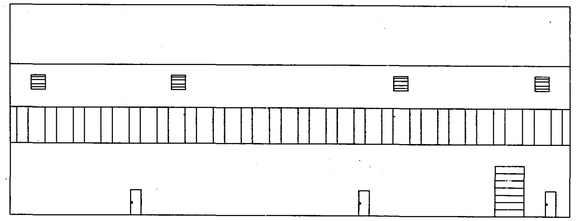
BUILDING PERSPECTIVES



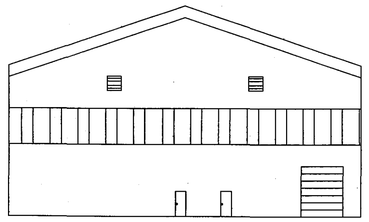
EAST FACE



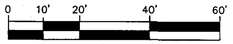
NORTH FACE



WEST FACE



SOUTH FACE



SCALE: 1" = 20'

NOTES

REV. NO.	CODE	CIRCLES	DATE	DESCRIPTION	SEC APPROVED
	REV. BY			NOTE: CIRCLE ALL REVISIONS, IDENTIFY WITH DIAMOND, NUMBER AND ARROW. REMOVE ONLY CIRCLE AND ARROW BEFORE NEXT REVISION.	

ISSUE CODE					
A	PRELIMINARY	C	MAT'L T.O.	F	CONST'N
B	DESIGN	D	MAT'L PURC.	G	
		E	BIDS	H	

SEAL

SIGNATURE

DATE

DR.	DATE
DSGN.	SEC FILE NUMBER
CK.	
DPE	JOB NO.
CAD FILE NO.	

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

DRAWING TITLE

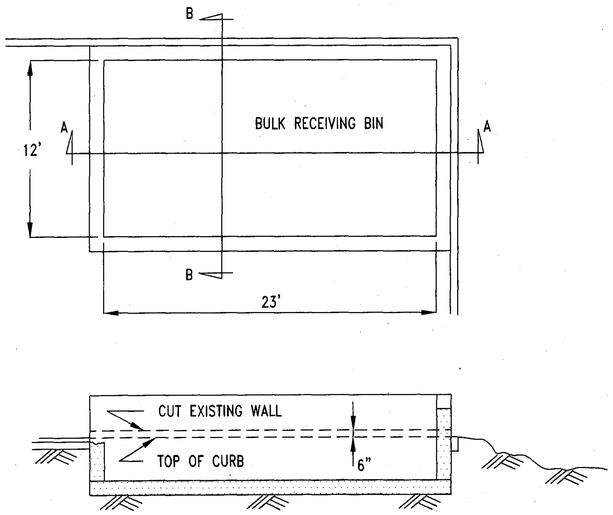
Stabilization Building
Elevations and Perspectives

CLIENT DRAWING NUMBER

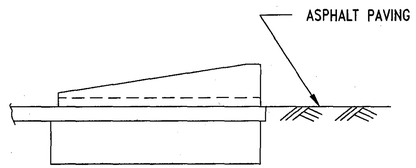
FIG. 4-14

SEC DRAWING NUMBER

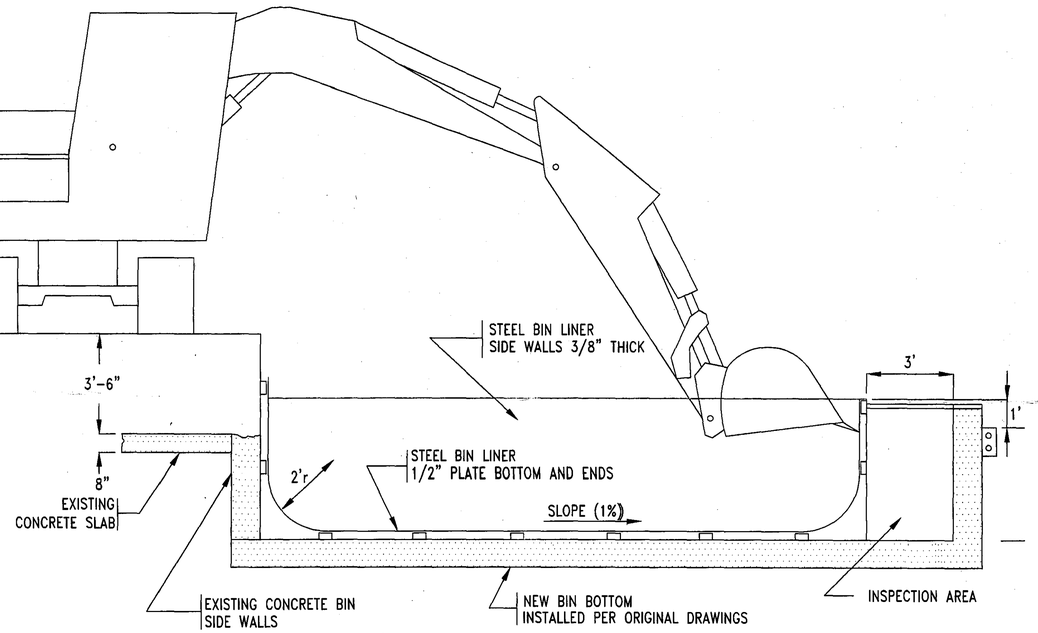
M1977-GA-02



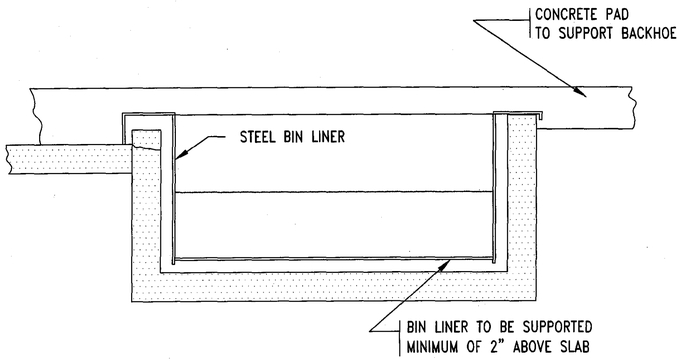
SECTION A–A



END VIEW



SECTION A–A SHOWING
PROPOSED STEEL LINER



SECTION B–B
CONCRETE BIN AND PROPOSED STEEL LINER

STABILIZATION FACILITY
EXISTING RECEIVING
BIN SECTION
FIG. 4–15

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

350 BARREL STORAGE SILO LOADS	
DEAD LOAD = 16,000 LBS.	LIVE LOAD = 133,000 LBS.

NOTES:

- DEAD LOAD WEIGHT ABOVE DOES NOT INCLUDE EQUIPMENT ADDED BY DAVIS PUGMILL.
- STEPHENS MFG. CO.,INC. ASSUMES NO RESPONSIBILITY FOR THE FOUNDATION EXCEPT TO FURNISH DIMENSIONS OF ALL COLUMN BASES AND ANCHOR BOLTS LAYOUT. FOOTERS MUST BE PROVIDED WITH SUFFICIENT AREA TO DISTRIBUTE MAXIMUM ANTICIPATED LOAD WITHOUT EXCEEDING BEARING VALUE OF SOIL.

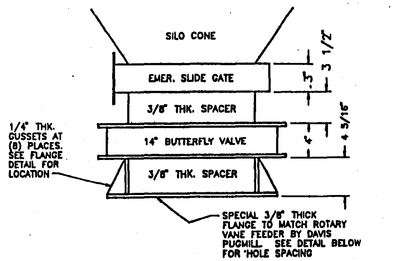
☐ APPROVED AS DRAWN
☐ APPROVED W/ NOTED REVISIONS
☐ RESUBMIT

PLEASE NOTE THAT ANY REVISIONS MADE AFTER APPROVAL OF THIS PRINT MAY RESULT IN A DELAY OF ORIGINALLY SCHEDULED DELIVERY DATE AND/OR AN ADDED PENALTY COST.

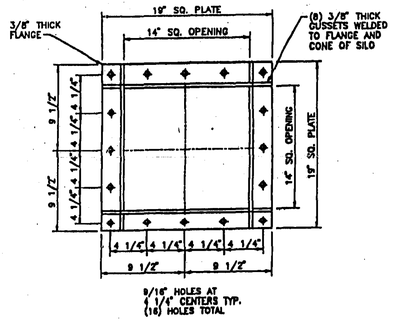
PLEASE RETAIN ONE (1) COPY AND RETURN ONE (1) COPY TO:
STEPHENS MFG. CO., INC.
P.O. BOX 488
TOMPKINSVILLE, KY. 42167
ATTN: DRAFTING DEPARTMENT

DATE: _____

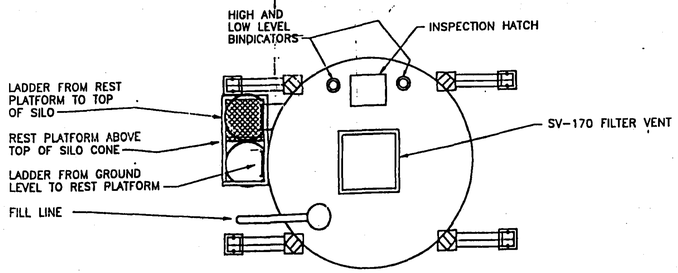
SIGNED: _____



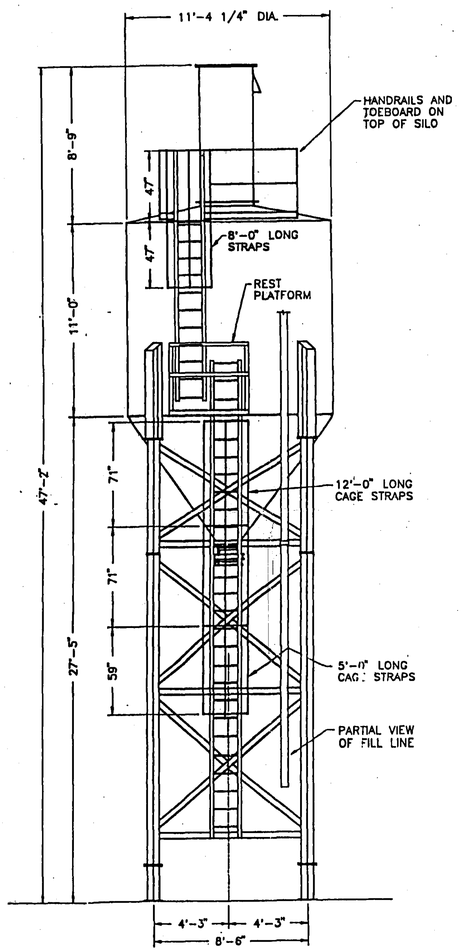
ENLARGED VIEW OF VALVE AREA
NO SCALE



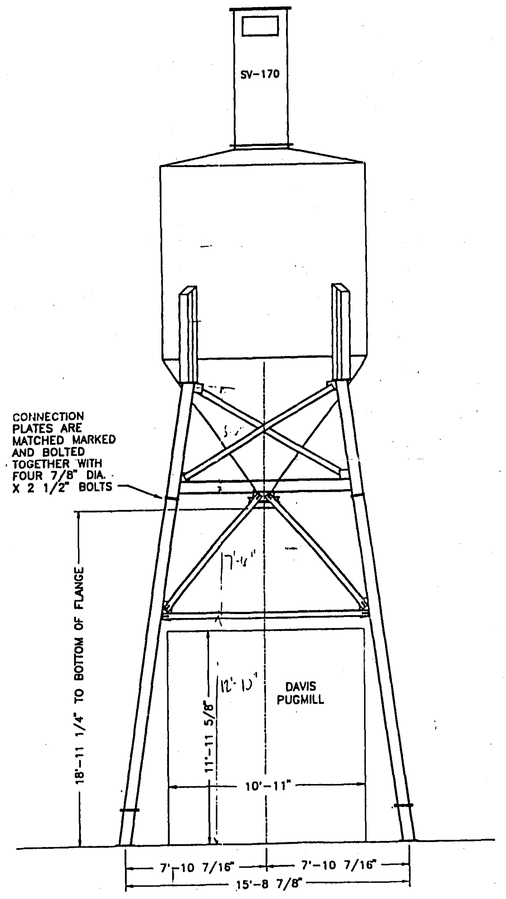
FLANGE DETAIL
NO SCALE



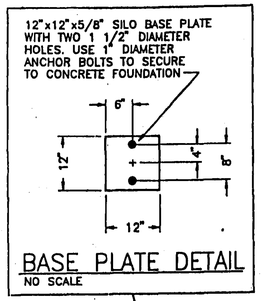
TOP VIEW
SCALE: 1/4"=1'-0"



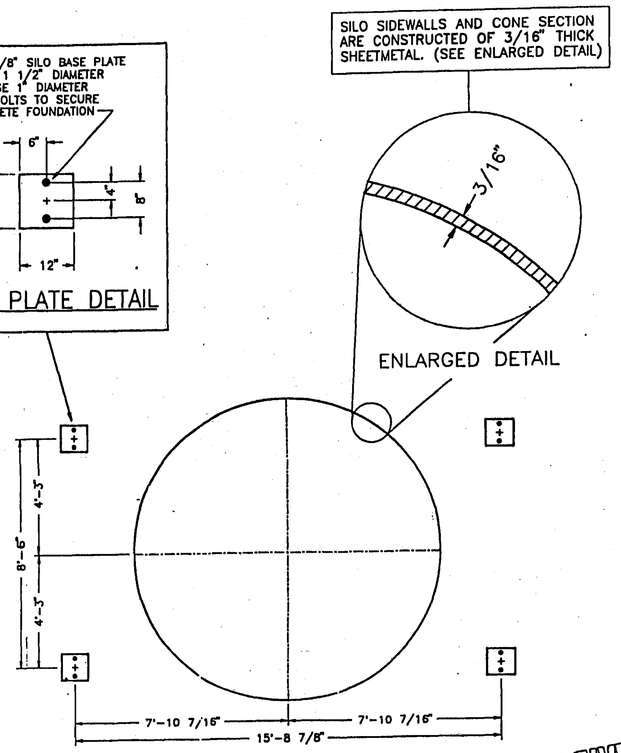
END ELEVATION
SCALE: 1/4"=1'-0"



FRONT ELEVATION
SCALE: 1/4"=1'-0"



BASE PLATE DETAIL
NO SCALE



RECEIVED
JUN 26 1991

350 BARREL SILO BASE PLATE AND ANCHOR BOLT LAYOUT

SCALE: 3/8"=1'-0"

FIG. 4-16

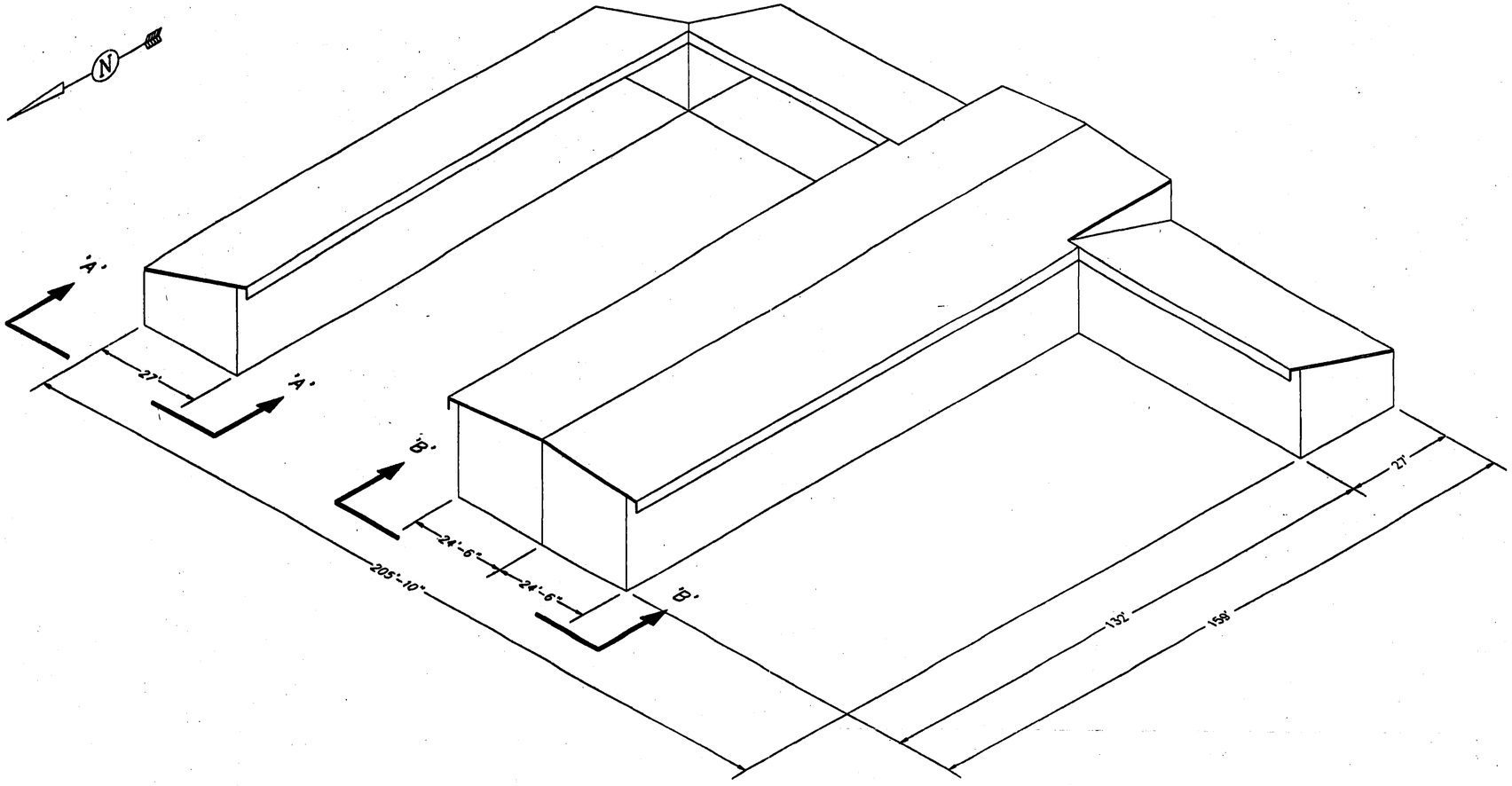
REVISED DRAWING
ISSUED DATE: 11-13-90
DESTROY ALL PREVIOUS PRINTS BEFORE THIS DATE

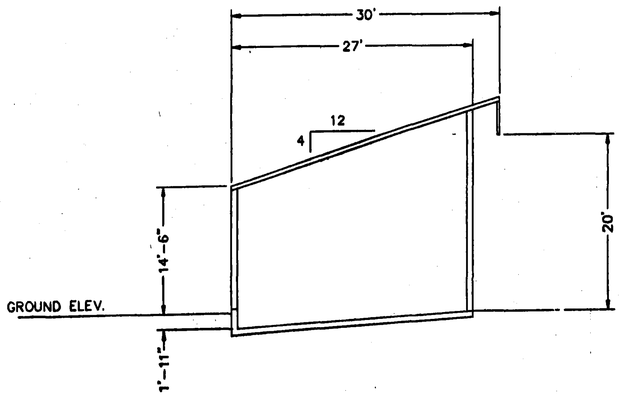
PREPARED FOR: DAVIS PUGMILL, COLUMBIA, TENNESSEE

DESCRIPTION: 350 BARREL STORAGE SILO WITH SPECIAL FLARED STRUCTURE

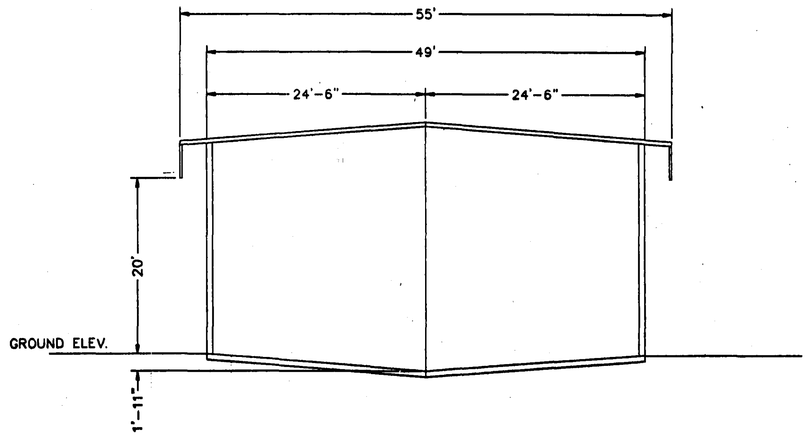
Stephens
TOMPKINSVILLE, KENTUCKY

SCALE:	DWN. BY:	DATE:	DRAWING NO.:	SHT. NO.:
NOTED	M.D.H.	11-1-90	25102	1 OF 1





SECTION 'A-A'
SCALE: 1/8"=1'-0".



SECTION 'B-B'
SCALE: 1/8"=1'-0"

0 8' 16' 32' 48'
SCALE: 1/16" = 1'-0"

NOTES

REV. NO.	CODE CIRCLES REV. BY	DATE	DESCRIPTION	SEC APPROVED
3	A WM	06/10/93	REVISED 48 CONTAINER STORAGE UNIT	
2	A WM	05/29/92	ISSUED PER NOI COMMENTS	
1		5/14/92	REVISED TO INCREASE CONTAINMENT	

NOTE: CIRCLE ALL REVISIONS, IDENTIFY WITH DIAMOND, NUMBER AND ARROW. REMOVE ONLY CIRCLE AND ARROW BEFORE NEXT REVISION.

ISSUE CODE					
A	PRELIMINARY	C	MAT'L T.O.	F	CONST'N *
B	DESIGN	D	MAT'L PURC.	G	
		E	BIDS	H	

SEAL

SIGNATURE

DATE

DR. AKW	DATE 05/13/92
DSGN. W.MILLER	SEC FILE NUMBER
CK.	
DPE W.MILLER	JOB NO. M1977
CAD FILE NO. FIG_4-32	

SECDonohue
Oak Brook, IL

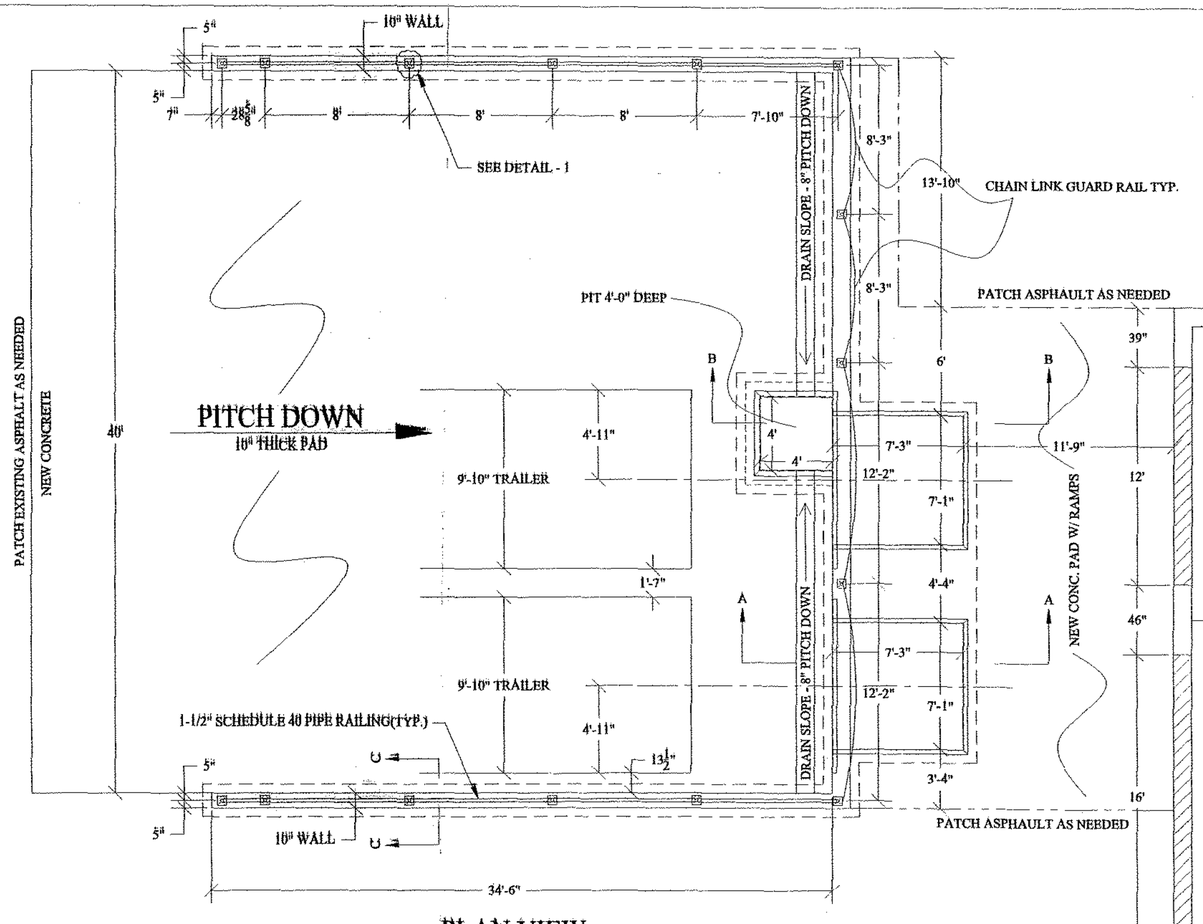
Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

DRAWING TITLE

SOUTHEAST CONTAINER STORAGE UNIT
PERSPECTIVE & SECTION

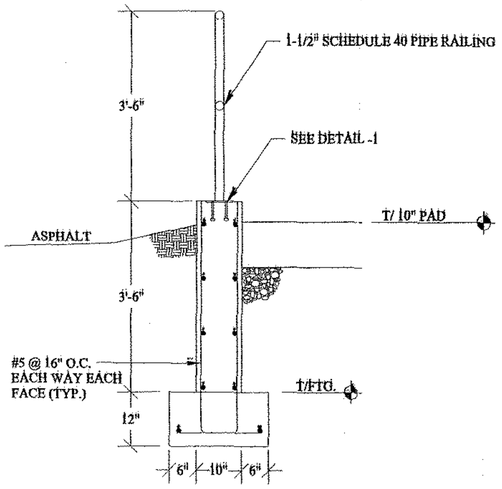
CLIENT DRAWING NUMBER
FIG. 4-17

SEC DRAWING NUMBER
M1977-GA-09



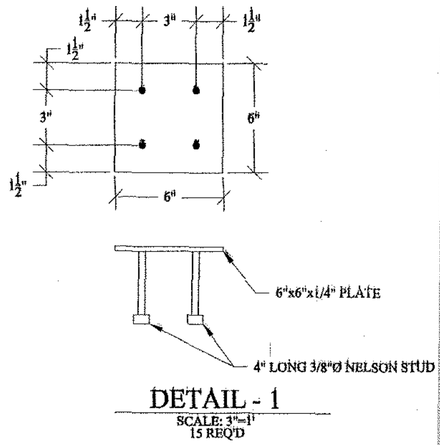
PLAN VIEW

SCALE: 1/4"=1'



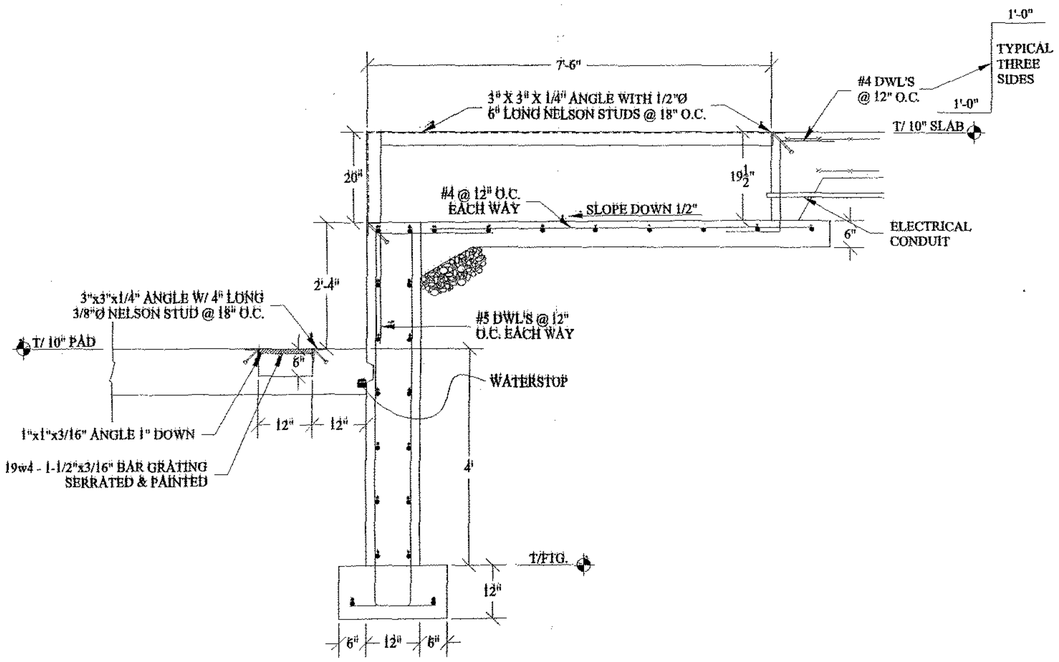
SECTION C-C

SCALE: 3/4"=1'



DETAIL - 1

SCALE: 3"=1'
15 REQ'D



SECTION A-A

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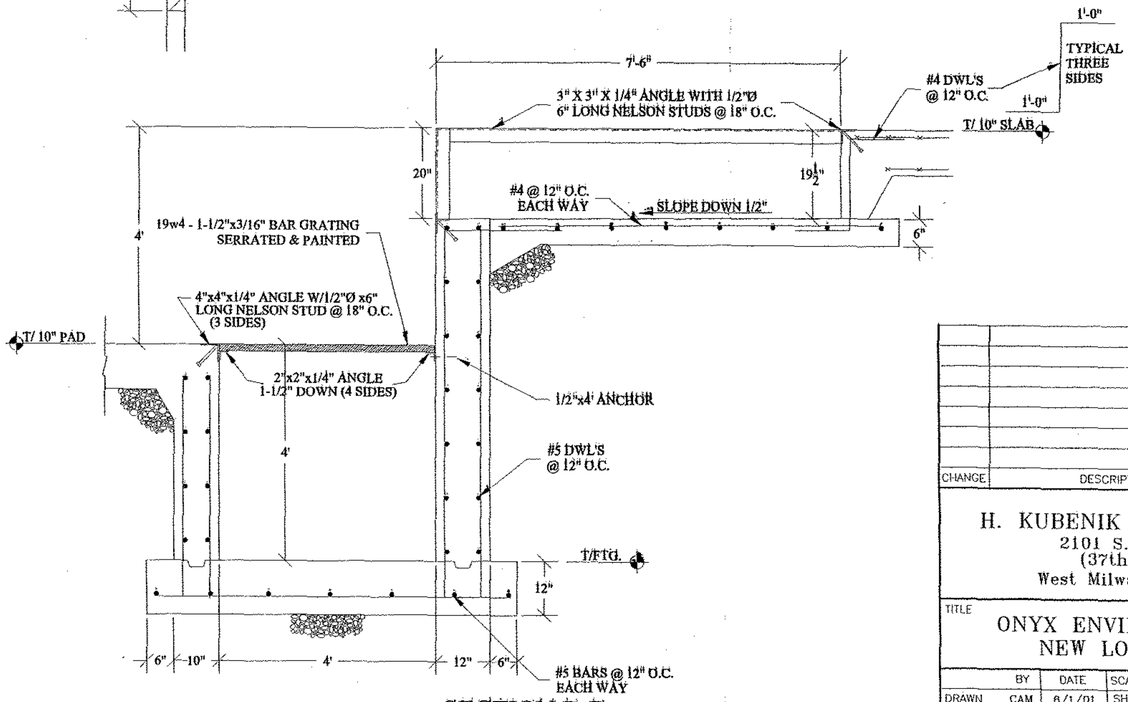


SECTION B-B

SCALE: 3/4"=1'

WISCONSIN
PROFESSIONAL ENGINEER
KEVIN D. MC GRATH
E-30493
Waukesha, WI

CHANGE	DESCRIPTION	BY	DATE

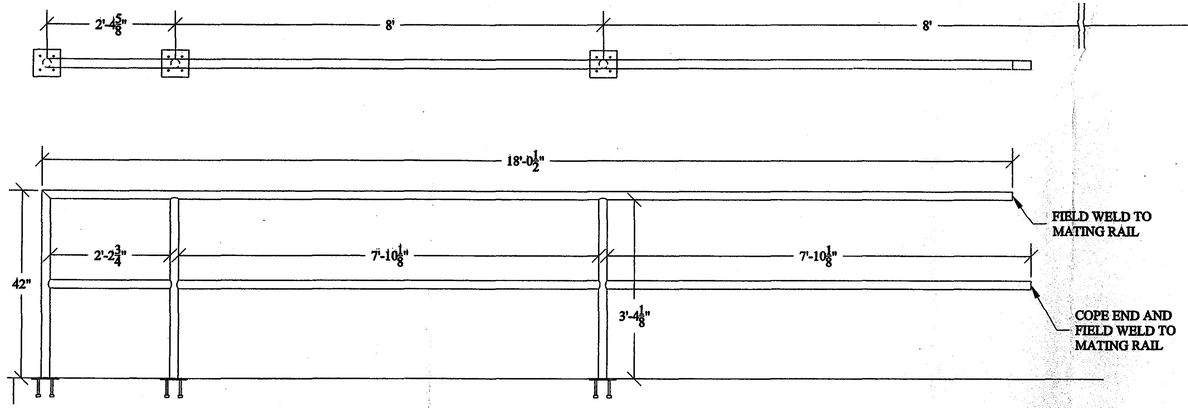
H. KUBENIK MECHANICAL INC.
2101 S. 37th Street
(37th & Becher)
West Milwaukee, WI 53215

TITLE
ONYX ENVIRONMENTAL LLC
NEW LOADING DOCK

	BY	DATE	SCALE	SCALE
DRAWN	CAM	6/1/01	SHEET	SHEETS
CHECKED			2 OF 2	
TRACED			JOB NO.	
APPROVED				

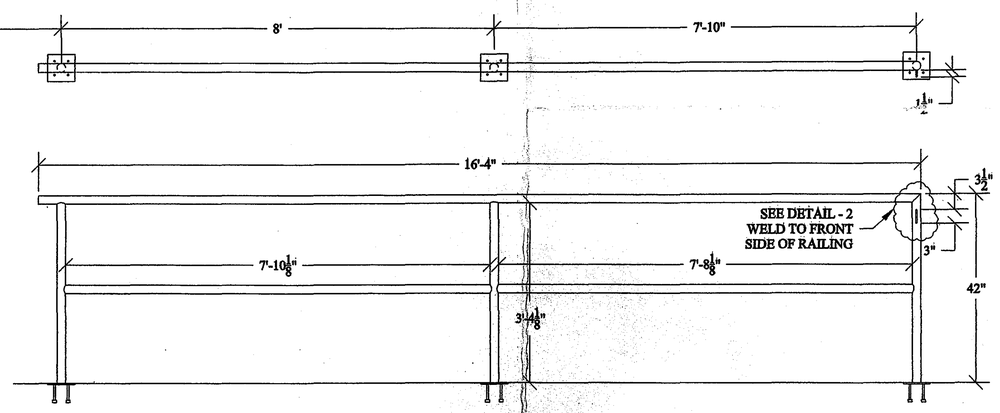
Figure
4-14

Doug Note 01-08-21: I think this figure should be labelled as 4-18



RAILING SECTION - 1

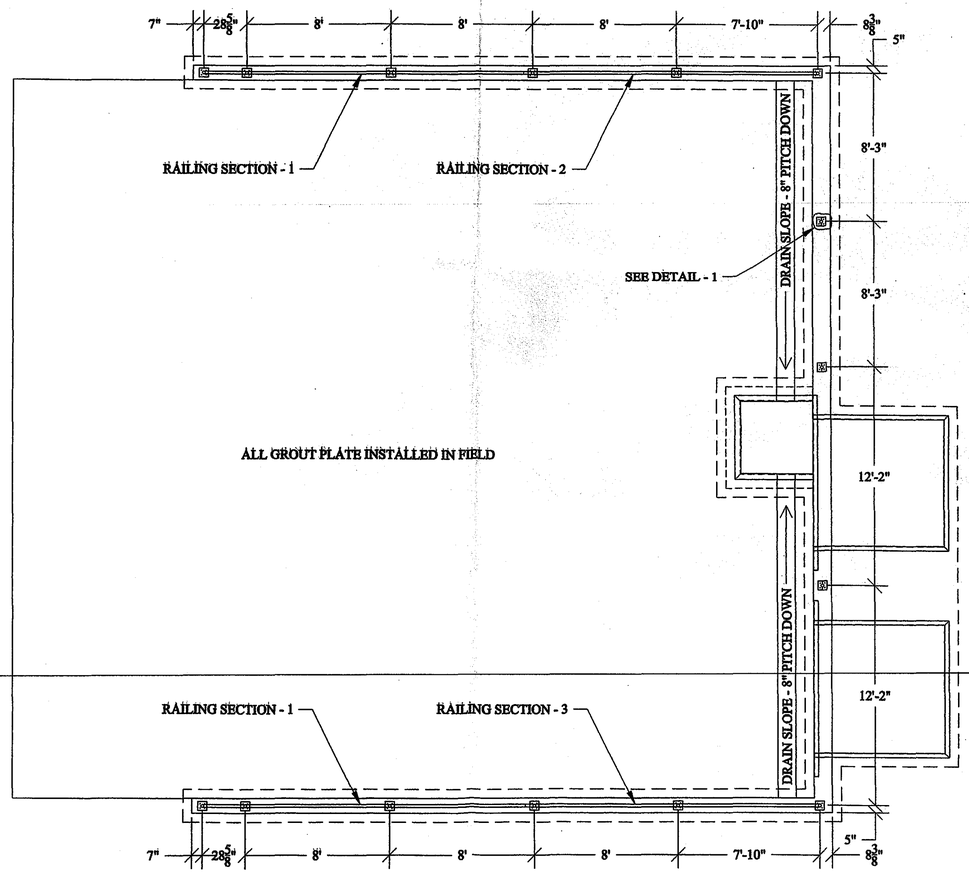
SCALE: 3/4"=1'
2 REQ'D

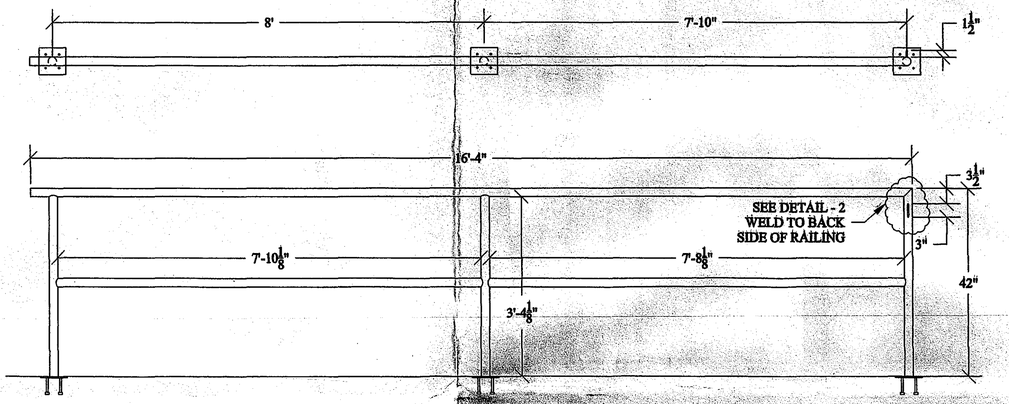


RAILING SECTION - 2

SCALE: 3/4"=1'
1 REQ'D

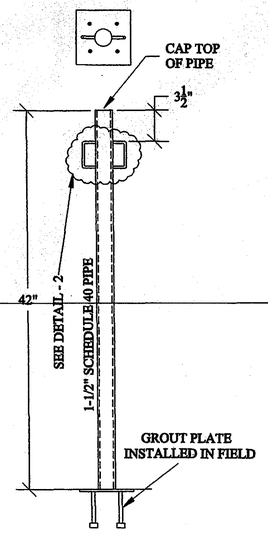
ALL MATERIAL 1-1/2"
SCHEDULE 40 PIPE





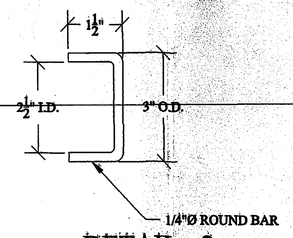
RAILING SECTION - 3

SCALE: 3/4"=1'
1 REQ'D



DETAIL - 1

SCALE: 3/4"=1'
3 REQ'D



DETAIL - 2

SCALE: 6"=1'
8 REQ'D

CHANGE	DESCRIPTION	BY	DATE

H. KUBENIK MECHANICAL INC.
2101 S. 37th Street
(37th & Becher)
West Milwaukee, WI 53215

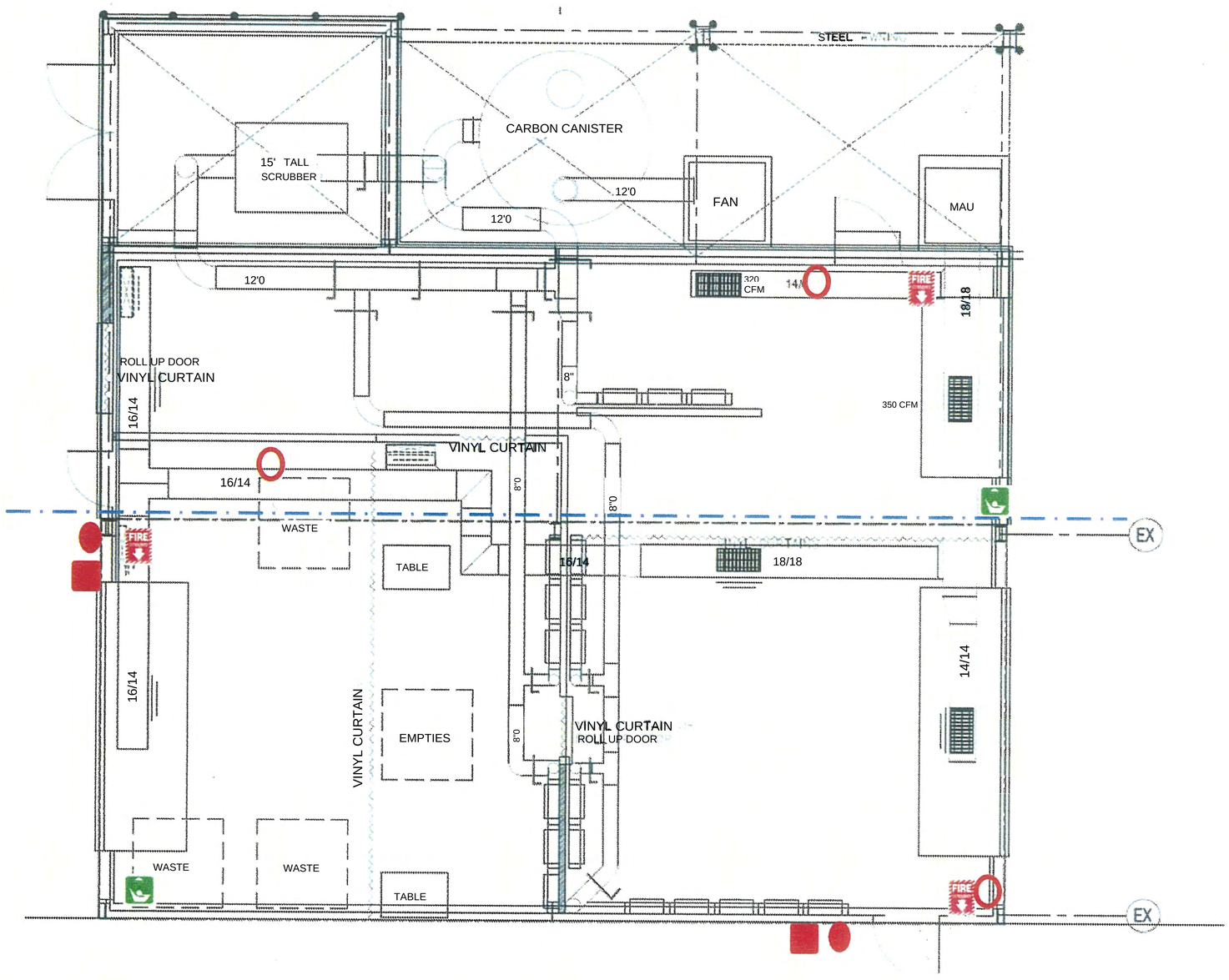
TITLE
Veolia ES Technical Solutions, L.L.C.
RAILING FOR LOADING DOCK

	BY	DATE
DRAWN	CAM	8/13/01
CHECKED		
TRACED		
APPROVED		

SCALE SCALE
SHEET 1 OF 1 SHEETS
JOB NO.

FIG. 4-19

Figure 4-20



N

KEY

- EX — Existing building
- Fire Extinguisher
- Safety Shower / Eyewash
- LEL Meter
- Foam Deluge Activation
- Emergency Evacuation Alarm

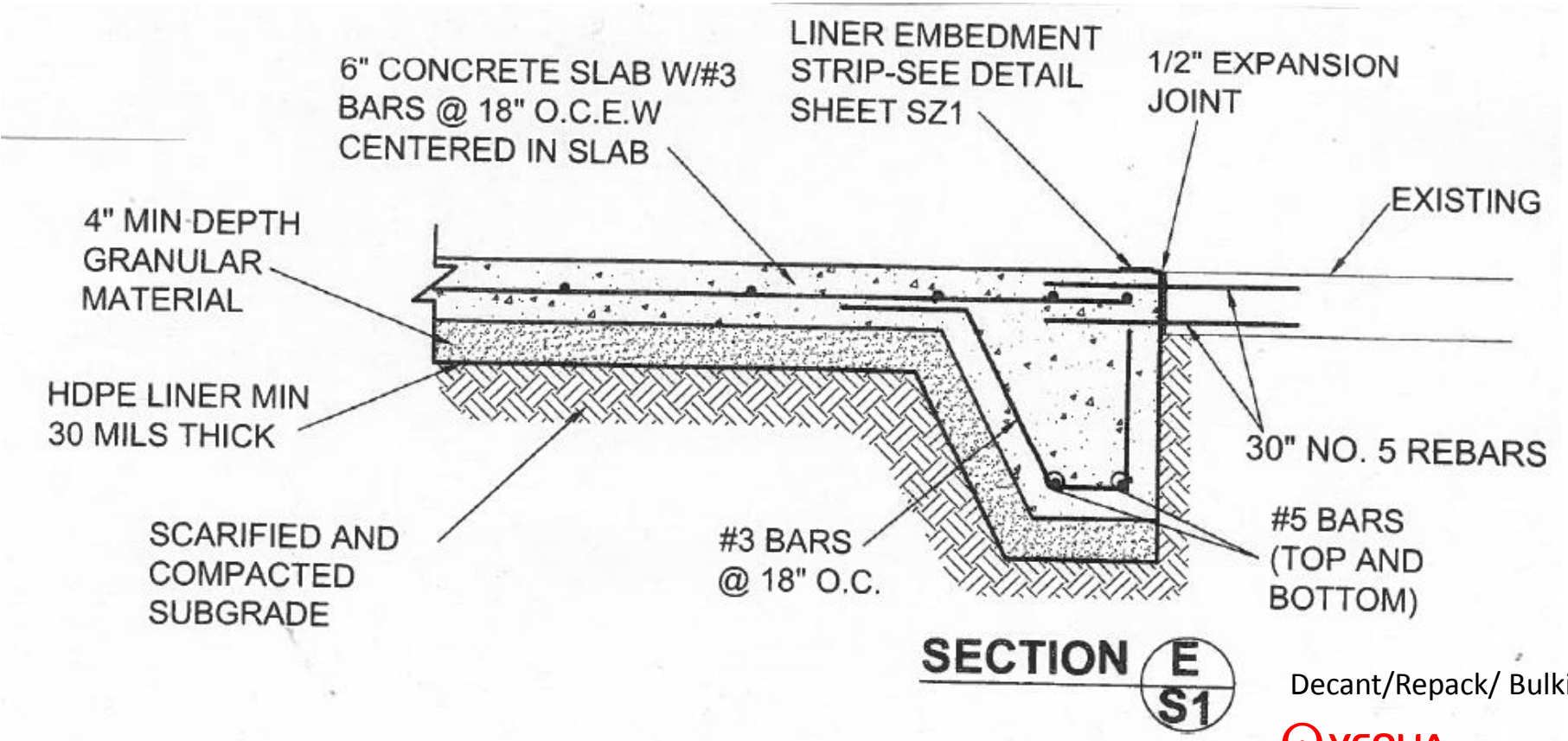
Decant/Repack/ Bulking

VEOLIA
ENVIRONMENTAL SERVICES

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

05/28/2013

Figure 4-21
Joint Detail – Existing to New Floor



Decant/Repack/ Bulking

VEOLIA ENVIRONMENTAL SERVICES
Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

05/31/2012

TABLE 4-1

EXAMPLES OF WASTE AND QUANTITIES TO BE MANAGED AT THE VEOLIA – MENOMONEE FALLS FACILITY

STORAGE AMD REPACK/BULKING/DECANT UNITS

WASTE	ANNUAL QUANTITY (TONS)
Recoverable and Non-Recoverable Organic Wastes	24,600
1. Non-Halogenated Solvent Wastes	
2. Halogenated Solvent Wastes	
3. TCLP Wastes	
4. Wood Preservative Wastes	
5. Ink and Dye Wastes	
6. Organic Chemical Manufacturing Wastes	
7. Pesticide/Herbicide Wastes	
8. Petroleum Wastes	
Inorganic Wastes	38,400
9. Corrosive Wastes	
10. TCLP Wastes (Metals)	
11. Treatment Residuals	
12. Inorganic Chemical Manufacturing Wastes	
13. Metal Finishing/Treating Wastes (Non-Reactive)	
Reactive Wastes	9,400
14. Reactive Wastes	
15. Metal Finishing Wastes (Reactive)	

STABILIZATION UNIT

WASTE	ANNUAL QUANTITY (TONS)
1. TCLP Waste	109,400
2. Corrosive Treatment Residuals	
3. Treatment Residuals	
4. Metal Finishing/Treating Wastes (Non-Reactive)	
5. Reactive Wastes	
6. Metal Finishing/Treating Wastes (Reactive)	

TABLE 4-2

EXAMPLES OF EPA WASTE CODES ASSIGNABLE TO GENERAL WASTE GROUPS

I. Recoverable and Non-Recoverable Organic-Based Wastes		
D001	F001 to F005	UO21 to UO22
D004 to D043	P026 to P028	UO24 to UO31
F001 TO F005	P034	UO34 to UO39
F039	P036 to P051	U041 to U053
K001	P054	U055 to U064
K009 to K011	P057 to P060	U066 to U099
K013 to K030	P062	U101 to U103
K083	P064	U105 to U132
K085	P066 to P072	U136 to U143
K093 to K096	P075 to P077	U147 to U150
K103 to K105	P082	U152 to U159
K073	P084 to P085	U161 to U174
K032 to K043	P088 to P089	U176 to U188
K097 to K099	P093 to P094	U190 to U194
K048 to K052	P097	U196 to U197
K101 to K102	P101 to P103	U200 to U203
K086	P108 to P109	U206 to U213
K060	P111	U218 to U222
K087	P116	U225 to U228
P001 to P005	P118	U230 to U233
P007 to P008	P123	U235 to U240
P014	U001 to U005	U242 to U244
P016 to P018	U007 to U019	U246 to U247
P020		
P022 to P024		
II. Inorganic Wastes		
D002	K069	P098 to P099
D004 to D043	K100	P104 to P107
F006	K084	P110
F012	P006	P113 to P115
F019	P010 to P013	P119 to P121
F039	P015	UO32
K002 to K008	P021	U134
K071	P029 to P030	U144 to U146
K106	P073 to P074	U151
K031	P087	U204
K046	P092	U214 to U217
K061 to K062		
III. Reactive Wastes		
D003 to D043	UO23	U160
F007 to F011	UO33	**U189**
F039	U133	U205
U006	U135	U223
UO20		

TABLE 4-3

WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]

VEOLIA – MENOMONEE FALLS FACILITY

HAZARDOUS WASTE TYPE [b]	WASTE DESCRIPTION	EPA HAZARD CODE [c]	BASIS FOR HAZARD DESIGNATION [d]	EPA ID NO. (40 CFR PART 261)
1. IGNITABLE WASTES Without other hazardous constituents	Unrecyclable waste oil, waste paint, waste solvents	I	F.P. <140°F	D001
With Solvents	Waste paint and paint sludges, waste paint thinner and stripper	I, T	F.P. <140°F	D001
With cadmium	Waste paint and paint sludges	I, EP	F.P. <140°F EP toxicity,TCLP Cd>1.0 mg/1	D001, D006
With chromium	Waste paint and paint sludges	I, EP	F.P. <140°F EP toxicity,TCLP Cr^{6}+≥5.0 mg/1	D001, D007
With lead	Waste paint and paint sludges, waste oil, leaded tank bottom residue	I, EP	F.P. <140°F EP toxicity,TCLP Pb≥5.0 mg/1	D001, D008

(a) Wastes listed here are not all-inclusive but are illustrative of major waste streams.

(b) Corresponds with hazardous waste categories on Table 4-3.

(c) Codes (40 CFR 261.30)
I = Ignitable Waste R = Reactive Waste I = Toxic Waste TCLP = Toxicity Characteristic Leaching Procedure
C = Corrosive Waste EP = EP Toxic Waste H = Acute Hazardous Waste

(d) F.P. = Flash Point EP = Extraction Procedure As = Arsenic Ba = Barium
Cd = Cadmium Cr^{6} + = Hexavalent Chromium Pb = Lead Hg = Mercury
Ag = Silver Se = Selenium

TABLE 4-3

WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]

VEOLIA – MENOMONEE FALLS FACILITY

With mercury	Waste paint and paint sludges	I, EP	F.P. <140°F EP toxicity,TCLP Hg>0.2 mg/i	D001, D009
With chromium and lead	Waste Paint and paint sludges	I, EP	F.P. <140°F EP toxicity,TCLP Cr^{6}+>5. 0 mg/1 Pb>5.0 mg/i	D001, D007, D008
With chromium and selenium	Cleaning solution	I, EP	F.P. <140°F EP toxicity,TCLP Cr^{6}+≥5.0 mg/1 Se≥1.0 mg/i	D001, D007, D010
With barium, chromium, and lead	Waste paint and paint sludges, spray paint booth waste	I, EP	F.P. <140°F EP toxicity,TCLP Ba>100 mg/1 Cr^{6}+>5. 0 mg/i Pb>5.0 mg/i	D001, D005, D007, D008
With corrosives	Waste nonhalogenated solvent	I, C	F.P. <140°F 2≥pH≥12.5	D001, D002
2. HALOGENATED SOLVENTS				
Degreasing solvents* and sludges	1,1,1-trichloroethane	T	listed waste 40 CFR 261.31	F001
Degreasing solvents* and sludges	Tetrachloroethylene, methylene chloride, trichloroethylene, carbon tetrachloride	T	listed waste 40 CFR 261.31	F001

TABLE 4-3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Degreasing solvents* and sludges	Trichloroethylene with tetrachloro-ethylene, barium, and chromium	T, EP	listed waste 40 CFR 261.31 EP toxicity,TCLP $Cr^{6}+\geq 5.0$ mg/l Ba>100 mg/l	F001, D005, D007
Spent solvents* and still bottoms	Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloro-ethane, chlorobenzene	T	listed waste 40 CFR 261.31	F002
Spent solvents* and still bottoms	Freon	T	listed waste 40 CFR 261.31	F002
Spent solvents* and still bottoms	Trichloroethylene with isopropanol and freon	T	listed waste 40 CFR 261.31	F002
Spent solvents* and still bottoms	Trichloroethylene. with 1,1,1-trichloro-ethane, acetone, methylene chloride, and ketones	I, T	F.P. <140°F listed waste 40 CFR 261.31	F002, F003, F004, F005
3. NONHALOGENATED SOLVENTS				
Spent solvents and still bottoms	Acetone	I	F.P. <140°F	F003
Spent solvents and still bottoms	Cresols and cresylic acid, nitrobenzene	T	listed waste 40 CFR 261.31	F004

* **Recoverable**

T A B L E 4 - 3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Spent solvents and still bottoms	Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine	I, T	F.P. <140°F listed waste 40 CFR 261.31	F005
Spent solvents and still bottoms	Methyl isobutyl ketone with pH <2.0	I, C	F.P. <140°F 2>pH	F003, D002
Spent solvents and still bottoms	Isobutyl alcohol with 2,4-D, 2,6-D, and 2,4,6-TCP	I, T	F.P. <140°F listed waste 40 CFR 261.31	F005, D016
Spent solvents and still bottoms	Ketones with chromium	I, EP	F.P. <140°F EP toxicity,TCLP Cr^{6}+>5.0 mg/1	F003, F005, D007
4. EP TOXIC/TCLP WASTES	Wastewater treatment sludge, process wastewater	EP	EP toxicity TCLP	D012, D013, D014, D015, D016, D017
Heavy metals contaminated waste	Paint wastes	EP	EP toxicity,TCLP Cr^{6}+≥5.0 mg/1 Pb>5.0 mg/1 Cd>1.o mg/1	D006, D007, D008
Pesticide-contaminated waste with arsenic	Spill cleanup residues	EP	EP toxicity,TCLP As≥5.0 mg/1	D014, D004

T A B L E 4 - 3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Lead contaminated	Solvent washes and sludges, water washes and sludges from ink formulation	T, EP	listed waste 40 CFR 261.32 EP toxicity,TCLP Pb>5.0 mg/1	K086
5. WOOD PRESERVATIVE WASTES With creosote	Spill cleanup materials	T	listed waste 40 CFR 261.31	0051
With pentachloro-phenol and creosote	Wastewater treatment bottom sediment sludge	T	listed waste 40 CFR 261.32	K001
With creosote,penta-chlorophenol, and chromium	Wastewater treatment bottom sediment sludge	T, EP	listed waste 40 CFR 261.32 EP toxicity,TCLP $Cr^{6}+\geq 5.0$ mg/1	K001, D007
6. PAINT, INK & DYE WASTES Ink and dye wastes	Solvent washes and sludges from ink formulation Caustic washes and sludges from ink formulation Water washes and sludges from ink formulation	T	listed waste 40 CFR 261.32	K086

TABLE 4-3

WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]

VEOLIA – MENOMONEE FALLS FACILITY

Paint wastes	Paint residue/sludges containing chrome, lead pigments	T	listed waste 40 CFR 261.31	F017
7. ORGANIC CHEMICAL MANUFACTURING WASTES Distillation bottoms	Chloroform, formaldehyde methylene chloride, paraldehyde, formic acid	T	listed waste 40 CFR 261.32	K009
Distillation side cuts	Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde	T	listed waste 40 CFR 261.32	K010
Bottom stream from wastewater stripper	Acrylonitrile, acetonitrile, hydrocyanic acid	R, T	listed waste 40 CFR 261.32	K011
Bottom stream from acetonitrile column	Hydrocyanic acid, acetonitrile	R, T	listed waste 40 CFR 261.32	K013
Bottoms from acetonitrile purification	Acetonitrile, acrylamide	T	listed waste 40 CFR 261.32	K014
Still bottoms from distillation	Benzyl chloride, chlorobenzene, toluene, benzotrichloride	T	listed waste 40 CFR 261.32	K015

TABLE 4-3

WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]

VEOLIA – MENOMONEE FALLS FACILITY

Heavy ends or distillation residues	Hexachlorobenzene, hexachlorobutadine, carbon tetrachloride, hexachloroethane, perchloroethylene	T	listed waste 40 CFR 261.32	K016
Heavy ends (still bottoms) .	Epichlorohydrin, chloroethers bis-(chloromethyl) ether and bis(2-chloro-ethyl) ethers), trichloropropane, dichloropropanols	T	listed waste 40 CFR 261.32	K017
Heavy ends	1,2-dichloroethane, trichloro-ethylene, hexachlorobutadiene, hexachlorobenzene	T	listed waste 40 CFR 261.32	K018
Heavy ends	Ethylene dichloride, 1,1,1-trichioro-ethylene, 1,1,2-trichloro-ethylene, and 1,1,1,2-tetra-chloroethane, tri-chloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, Vinyl chloride, vinylidene chloride	T	listed waste 40 CFR 261.32	K019

TABLE 4-3

WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]

VEOLIA – MENOMONEE FALLS FACILITY

Heavy ends	Ethylene dichloride, 1,1,ltrichloro-ethane, 1,1,2-tri-chloroethane, tetra-chloroethanes (1,1,2,2-tetrachloro-ethane and 1,1,1,2-tetrachloroethane), trichloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride	T	listed waste 40 CFR 261.32	K020
Aqueous spent antimony catalyst	Antimony, carbon tetrachloride, chloroform	T	listed waste 40 CFR 261.32	K021
Distillation bottom tars	Phenol, tars (polycyclic aromatic hydrocarbons)	T	listed waste 40 CFR 261.32	K022
Distillation light ends	Phthalic anhydride, maleic anhydride	T	listed waste 40 CFR 261.32	K023
Distillation bottoms	Phthalic anhydride, 1,4-naphthoquinone	T	listed waste 40 CFR 261.32	K024
Distillation	Meta-dinitrobenzene, 2,4-dinitrotoluene	T	listed waste 40 CFR 261.32	K025

T A B L E 4 - 3
WASTE CHARACTERISTICS --RECOVERABLE AND NON—RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Stripping still tails	Paraldehyde, pyridines, 2-picoline	T	listed waste 40 CFR 261.32	K026
Centrifuge and distillation residues	Toluene diisocyanate, toluene-2,4 diamine	R, T	listed waste 40 CFR 261.32	K027
Spent Catalyst	1,1,1-trichloroethane	T	listed waste 40 CFR 261.32	K028
Product steam stripper	1,2-dichloroethane, 1,1,1-trichloro-ethane, vinyl chloride, vinylidene chloride, chloroform	T	listed waste 40 CFR 261.32	K029
Column bottoms or heavy ends	Hexachlorobenzene, hexachlorobuta-diene, hexachloroethane, 1,1,1,2-tetrachloro-ethane, 1,1,2,2-tetrachloroethane, ethylene dichloride	T	listed waste 40 CFR 261.32	K030
Distillation bottoms	Analine, diphenyl-amine, nitrobenzene, pheneylenediamine	T	listed waste 40 CFR 261.32	K083

TABLE 4-3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Chlorinated hydrocarbon wastes .	Chloroform, carbon tetrachloride, hexa-chloro ethane, tri-chloroethylene, dichloroethylene 1,1,2,2-tetrachloro-ethane	T	listed waste 46 CFR 261.32	K073
Distillation or fractionation column bottoms	Benzene, dichloro-benzenes, trichloro-benzenes, tetra-chlorobenzene, hexa-chlorobenzene, benzyl chloride	T	listed waste 40 CFR 261.32	K085
Distillation light ends	Phthalic anhydride, maleic anhydride	T	listed waste 40 CFR 261.32	K093
Distillation bottoms	Phthalic anhydride	T	listed waste 40 CFR 261.32	K094
Distillation bottoms	1,1,2-trichloro-ethane, 1,1,1,2-tetrachloroethane, i,i,2,2-tetrachloro-ethane	T	listed waste 40 CFR 261.32	K095
Heavy ends	1,2 dichloroethane, 1,1,1-trichloro-ethane, 1,1,2-trichloroethane	T	listed waste 40 CFR 261.32	K096

TABLE 4-3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Process residues	Aniline, nitrobenzene, phenylenediamine	T	listed waste 40 CFR 261.32	Ki03
Combined waste water stream .	Aniline, benzene, diphenylamine, nitrobenzene, phenylenediamine	T	listed waste 40 CFR 261.32	K104
Separate aqueous stream	Benzene, monochlorobenzene, dichlor-obenzenes, 2,4,6-trichlorophenol	T	listed waste 40 CFR 261.32	K105
Decanter tank	Phenol, naphthalene	T	listed waste 40 CFR 261.32	K087
Ammonia still lime sludge	Cyanide, naphthalene, phenols, arsenic	T	listed waste 40 CFR 261.32	K060
8. PESTICIDE WASTES By product salts	Arsenic	T	listed waste 40 CFR 261.32	K031
Wastewater treatment sludge	Hexachlorocyclopenta-diene	T	listed waste 40 CFR 261.32	K032
Wastewater and scrub water	Hexachlorocyclopenta-diene	T	listed waste 40 CFR 261.32	K033
Filter solids	Hexachlorocyclopenta-diene	T	listed waste 40 CFR 261.32	K034

T A B L E 4 - 3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

Wastewater treatment sludges	Creosote, chrysene, naphthalene, fluor-anthene, benzo(a)-pyrene, benzo(a)-anthracene, acenaphthalene	T	listed waste 40 CFR 261.32	K035
Still bottoms	Toluene, phosphoro-dithoic and phosphor-othioic acid esters	T	listed waste 40 CFR 261.32	K036
Wastewater treatment sludges	Toluene, phosphorodi-thioic and phosphoro-thioic acid esters	T	listed waste 40 CFR 261.32	K037
Wastewater from washing and stripping	Phorate, formalde-hyde, phosphorodi-thioic and phospho-thioic acid esters	T	listed waste 40 CFR 261.32	K038
Filter cake	Phosphorodithioic and phosphothioic acid esters	T	listed waste 40 CFR 261.32	K039
Wastewater treatment sludge	Phorate, formalde-hyde, phosphorodi-thioic and phospho-thioic acid esters	T	listed waste 40 CFR 261.32	K040
Wastewater treatment sludge	Toxaphene	T	listed waste 40 CFR 261.32	K041
Heavy ends or distillation residues	Hexachlorobenzene, orthodichlorobenzene	T	listed waste 40 CFR 261.32	K042

TABLE 4-3
WASTE CHARACTERISTICS --RECOVERABLE AND NON-RECOVERABLE ORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

2,6 dichlorophenol waste	2,4-dichlorophenol, 2,6-dichloro-phenol, 2,4,6-trichlorophenol	T	listed waste 40 CFR 261.32	K043
Vacuum stripper discharge	Chlordane, heptachlor	T	listed waste 40 CFR 261.32	K097
Untreated process wastewater	Toxaphene	T	listed waste 40 CFR 261.32	K098
Untreated process wastewater	2,4-dichlorophenol, 2,4,6-trichlorophenol	T	listed waste 40 CFR 261.32	K099
9. PETROLEUM WASTES				
DAF/float	Hexavalent chromium, lead	T	listed waste 40 CFR 261.32	K048
Slop oil emulsion solids	Hexavalent chromium, lead	T	listed waste 40 CFR 261.32	K049
Heat exchanger cleaning sludge	Hexavalent chromium	T	listed waste 40 CFR 261.32	K050
API separator sludge	Hexavalent chromium, lead	T	listed waste 40 CFR 261.32	K051
Tank bottom	Lead	T	listed waste 40 CFR 261.32	K052

TABLE 4-4
WASTE CHARACTERISTICS -- INORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

HAZARDOUS WASTE TYPE [b]	WASTE DESCRIPTION	EPA HAZARD CODE [c]	BASIS FOR HAZARD DESIGNATION [d]	EPA ID NO. (40 CFR PART 261)
10. CORROSIVE WASTES Without other hazardous constituents	Waste acids and acid solutions, acid sludges, filter cake, solidified acid sludges, off-spec. product, cleaning solutions, discarded chemical product, alkaline cleaning compound, alkaline sludge	C	2≥pH≥12.5	D002
With cadmium	Waste acid solutions	C, EP	2≥pH≥12.5 EP toxicity, TCLP Cd>1.0 mg/1	D002, D006
Corrosive with chromium and lead	Spent pickle liquor from iron and steel industry	C, T	2≥pH≥12.5 listed waste 40 CFR 261.32	K062
With chromium	Waste acid etching solution, alkaline wastewater	C, EP	2≥pH≥12.5 EP toxicity, TCLP $Cr^{6}+$≥5.0 mg/1	D002, D007

TABLE 4-4
WASTE CHARACTERISTICS -- INORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

With lead	Waste acid and alkaline cleaning solutions, waste paint	C, EP	2≥pH≥12.5 EP toxicity,TCLP Pb>5.0 mg/1	D002, D008
With cadmium and chromium	Waste ion exchange solutions	C, EP	2≥pH≥12.5 EP toxicity,TCLP Cd>1.0 mg/1 Cr^{s} +>5. o mg/1	D002, D006. D007
With chromium and mercury	Waste acid solution	C, EP	2≥pH≥12.5 EP toxicity,TCLP Cr^{6}+>5. 0 mg/1 Hg>6.2 mg/1	D002, D007, D009
With cadmium, chromium and lead	Wastewater	C, EP	2≥pH≥12.5 EP toxicity,TCLP Cd>1.0 mg/1 Pb>5.0 mg/1	D002, D006,D007, D008
With cadmium, chromium, lead, mercury and spent halogenated solvent	Waste acid solution	C, EP	2≥pH≥12.5 EP toxicity,TCLP Cd>1.0 mg/1 Pb>5.0 mg/1 Hg>0.2 mg/1	D002, D006, D007, D008, D009, F001

TABLE 4-4
WASTE CHARACTERISTICS -- INORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

11. EP TOXIC/TCLP WASTES	Heavy metal sludges, solids from ore processing, extrusion process sludge, paint waste	EP	EP toxicity, TCLP Pb≥5.0 mg/1	D008
Barium-contaminated waste with cadmium, chromium, lead, mercury and selenium	Salt bath sludge	EP	EP toxicity, TCLP Ba≥100 mg/l Cd≥1.0 mg/l Cr^{6}+≥5.0 mg/l Pb≥5.0 mg/l Hg≥0.2 mg/l Se≥1.0 mg.l	D005, D006, D007,
Arsenic-contaminated waste	Wastewater	EP	EP toxicity, TCLP As≥5.0 mg/1	D004
With mercury, selenium and/or silver	Waste treatment sludges Metal preparation sludges Metal hydroxide sludges Paint/ink sludges Caustic waste stripper	EP	EP toxicity, TCLP Hg≥0.2 mg/1 Se≥1.0 mg/1 Ag≥5.0 mg/1	D009, D010, D011

TABLE 4-4
WASTE CHARACTERISTICS -- INORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

12. INORGANIC CHEMICAL MANUFACTURING WASTES With hexavalent chromium and lead	Wastewater treatment sludges	T	listed waste 40 CFR 261.32	K002, K003, K005
With hexavalent chromium	Wastewater treatment sludges	T	listed waste 40 CFR 261.32	K004, K006
With hexavalent chromium	Oven residue from pigment production	T	listed waste 40 CFR 261.32	K008
With mercury	Brine purification muds	T	listed waste 40 CFR 261.32	K071
With mercury	Wastewater treatment sludge	T	listed waste 40 CFR 261.32	K106
With hexavalent chromium, lead, cadmium	Emission control sludge	T	listed waste 40 CFR 261.32	K061, K069
With lead, cadmium	Acid slurry/sludge	T	listed waste 40 CFR 261.32	K064
With lead, cadmium	Sludge from treatment of process wastewater	T	listed waste 40 CFR 261.32	K066, K067
With lead, cadmium	Cadmium plant leachate residue	T	listed waste 40 CFR 261.32	K068
With arsenic	Wastewater treatment sludges	T	listed waste 40 CFR 261.32	K084

TABLE 4-4
WASTE CHARACTERISTICS -- INORGANIC WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

With chromium, lead, cadmium	Waste leaching solution	T	listed waste 40 CFR 261.32	K100
13. METAL FINISHING / TREATING WASTES With cadmium and chromium	Wastewater treatment sludge	T	listed waste 40 CFR 261.32	F006
With lead, cadmium, and silver	Wastewater treatment sludge	T	listed waste 40 CFR 261.32	F006
With lead, chromium, and mercury	Wastewater treatment sludge	T	listed waste 40 CFR 261.32	F006
With cyanide, cadmium, lead and silver	Electroplating bath sludges	T	listed waste 40 CFR 261.32	F008
With hexavalent chromium	Heat treatment quenching sludges	T	listed waste 40 CFR 261.32	F019'
With cyanide (complexed)	Waste treatment sludges and filter cake	T	listed waste 40 CFR 261.32	F012'

TABLE 4-5
WASTE CHARACTERISTICS -- REACTIVE WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

HAZARDOUS WASTE TYPE [b]	WASTE DESCRIPTION	EPA HAZARD CODE [c]	BASIS FOR HAZARD DESIGNATION [d]	EPA ID NO. (40 CFR PART 261)
14. Reactive Wastes Without other hazardous constituents	Solids from ore processing	R	Reactivity	D003
With lead	Carbon black	R, EP	EP toxicity,TCLP	D003, D008
Bottom stream from wastewater stripper	Acrylonitrile, acetonitrile, hydrocyanic acid	R, T	Reactivity listed waste 40 CFR 261.32	K011
Bottom stream from acetonitrile column	Hydrocyanic acid, acrylonitrile, acetonitrile	R, T	Reactivity listed waste 40 CFR 261.32	K013
15. Metal Finishing Wastes Water reactive	Solids from secondary metals processing	R	Reactivity listed waste 40 CFR 261.31	D003
With cyanide (salts)	Spent cyanide plating bath; solutions from electroplating	R, T	listed waste 40 CFR 261.31	F007
With cyanide (salts)	Plating bath sludges	R, T	listed waste 40 CFR 261.31	F008

T A B L E 4 - 5
WASTE CHARACTERISTICS -- REACTIVE WASTES[a]
VEOLIA – MENOMONEE FALLS FACILITY

With cyanide (salts)	Spent stripping and cleaning bath solutions from electroplating	R, T	listed waste 40 CFR 261.31	F009
With cyanide (salts)	Quenching bath sludge from oil baths from electroplating	R, T	listed waste 40 CFR 261.31	F010
With cyanide (salts)	Spent cyanide solutions from salt bath cleaning from metal heat treating	R, T	listed waste 40 CFR 261.31	F011
With cyanide (salts)	Spent cyanide	R, T	listed waste 40 CFR 261.31	F015

T A B L E 4 - 6

TOXICITY CHARACTERISTIC - BASED ON TCLP

USEPA Hazardous Waste Number	Constituent	Regulatory Level - in *mg/1* (ppm)
D004	Arsenic	5.0
D005	Barium	100.0
D018	Benzene	0.5
D006	Cadmium	1.0
D019	Carbon Tetrachloride	0.5
D020	Chlordane	0.03
D021	Clorobenzene	100.0
D022	Cloroform	6.0
D007	Chromium	5.0
D023	o-Cresol	200.0 *
D024	m-Cresol	200.0 *
D025	p-Cresol	200.0 *
D026	Cresol	200.0 *
D016	2,4-1)	10.0
D027	1,4-Dichlorobenzene	7.5
D028	1,2-Dichloroethane	0.5
D029	1,1-Dichloroethylene	0.7
D030	2,4-Dinitrotoluene	0.13
D012	Endrin	0.02
D031	Heptachlor, and its Hydroxide	0.008
D032	Hexachlorobenzene	0.13
D033	Hexachloro-1,3-butadiene	0.5
D034	Hexachloroethane	3.0
D008	Lead	5.0
D013	Lindane	0.4
D009	Mercury	0.2
D014	Methoxychlor	10.0
D035	Methyl Ethyl Ketone (MEK)	200.0
D036	Nitrobenzene	2.0
D037	Pentachlorophenol	100.0
D038	Pyridine	5.0
D010	Selenium	1.0
D011	Silver	5.0
D039	Tetrachloroethylene	0.7
D015	Toxaphene	0.5
D040	Trichloroethylene	0.5
D041	2,4,5-Trichlorophenol	400.0
D042	2,4,6-Trichiorophenol	2.0
D017	2,4,5-TP Silvex	1.0
D043	Vinyl Chloride	0.2

(200 ppm) *is* used.

***** - If the o-, m-, and p-CresoI concentrations cannot be differentiated, then the total cresol (D026) concentration

T A B L E 4 - 7

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

The following list of materials is considered to be toxic or acutely toxic. The basis for listing is inherent with the individual compound. Another known basis or multiple bases are indicated by capital letters in parentheses: R = reactive; I = ignitable; C = corrosive; T = toxic. If no letter is shown, the compound should be considered as singularly acutely toxic.

EPA Hazardous Waste No.	Substance
P001	3-(alpha-acetonylbenzyl)-4-hydroxycoumarin and salts
P002	1-Acetyl-2-thiourea
P003	Acrolein, Agarin (see P007), Agrosan GN 5 (see P092), Aldicarb (see P069), Aldifen (see PO48)
P004	Aldrin, Algimycin (see P092)
P005	Allyl alcohol
--	ALVIT (see P037)
P006	Aluminum phosphide
P007	Aminoethylene (see P054), 5-(Aminomethyl)-3-isoxazolol
P008	4-Aminopyridine, Ammonium metavanadate (see P119)
--	AN'TIMUCIN WDR (see P092), ANTURAT (see P073), AQUATHOL (see P088), ARETIT (see P020)
P009	Ammonium picrate
P010	Arsenic Acid
P011	Arsenic pentoxide
P012	Arsenic trioxide, Athrombin (see P001), Aziridene (see P054), AZOGOD (see P061), Azophos (see P061), BANTU (see P072)
P013	Barium Cyanide, BASENITE (see P020), BCME (see P016)
P014	Benzenethiol, Benzoepin (see P050)
P015	Beryllium dust
P016	Bis(chloromethyl) ether, BLADAN-M (see P071)
P017	Bromoacetone

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P018	Brucine
P019	2-Butanone peroxide, BUFEN (see P092), Butaphene (see P020)
P020	2-sec-Butyl-4,6-dinitrophenol
P021	Calcium cyanide, CALDON (see P020)
P022	Carbon disulfide, CERESAN (see P092), CERESAN UNIVERSAL (see P092), CHEMOX GENERAL (see P020), CHEMOX P.E. (see P020), CHEM-TOL (see P090)
P023	Chloroacetaldehyde
P024	p-Chloroaniline
P026	1-(o-Chlorophenyl) thiourea
P027	3-Chloropropiontrile
P028	Alpha-Chlorotoluene
P029	Copper cyanides, CRETOX (see P108), Coumadin (see P001), Coumafen (see P001)
P030	Cyanides (soluable cyanide salts), not specified elsewhere
P031	Cyanogen
--	Cyclodan (see P050)
P033	Cyanogen chloride
P034	2-Cyclohexyl-4,6-dinitrophenol, D-CON (see P001), DETHMOR (see P001), DETHNEL (see P001), D, FP (see PO43)
P036	Dichlorophenylarsine
P037	Dieldrin, DIELDREX
P038	Diethylarsine
P039	0,0-Diethyl-S-2-(ethylioethyl) ester of phosphorothioic acid
P040	0,0-Diethyl-0-(2-pyrazinyl) phosphorothioate

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P041	0,0-Diethyl phosphoric acid, 0-p-nitrophenynyl ester
P042	3,4-Dihydroxy-alpha-(methylamino)-methyl benzyl alcohol
P043	Di-isopropyl fluorophosphate, DIMETATE (see PO44), 1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro endo, endo (see P060)
P044	Dimethoate
P045	3,3-Dimethyl-1-(methylthio), 2-butanone-0-(methylamino carbonyl) oxime
P046	alpha, alpha-Dimethylphenthylamine, Dinitrocyclohexylphenol (see P034
P047	4,6 Dinitro-o-cresol and salts
P048	2,4-Dinitrophenol, DINOSEB (see P020), DINOSEBE (see P020), Disulfoton (see P039)
P049	2,4-Dithiobiuret, DNBP (see P020), DOLCO MOUSE CEREAL (see P108), DOW GENERAL (see P020), DOW GENERAL WEED KILLER (see P020), DOW SELECTIVE WEED KILLER (see P020), DOWICIDE G (see P090), DYANICIDE (see P092), EASTERN STATES DUOCIDE (see P001), ELGETOL (see P020)
P050	Endosulfan
P051	Endrin, Epinephrine (see PO42)
P054	Ethylenimine, EASCO FASCRAT POWDER (see P001), FEMMA (see P091)
P056	Fluorine
P057	2-Fluoroacetamide
P058	Fluoroacetic acid, sodium salt, FOLODOL-80 (see P071), FOLODOL M (see P071), FOSFERNO M 50 (see P071), FRATOL (see P058), FUNGITOX OR (see P092), FUSSOF (see P057), GALLOTOX (see P092), CEARPHOS (see P071), GERUTOX (see P020)
P059	Heptachlor
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4,5,8-endo, endo-dimethanonapthalene 1,4,5,6,7,7-Hexachloro-cyclic-5 norbomene-2,3-dimethanolsulfite (see P050)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P062	Hexaethyl tetrophosphate, HOSTAQUICK (see P092), hydrazomethane (see P068)
--	ILLOXOL (see P037), INDOCI (see P025), Indomethaoin (see P025), INSECTOPHENE (see P050), Isodrin (see P060)
P063	Hydrogen cyanide
P064	Isocyanic acid, methyl ester, KILOSEB (see P050), KWIK-KIL (see P108), KWIKSAN (see P092), KUMADER (see P001), KYPFARIN (see P001), LEYTOSAN (see P092), LIQUIPHENE (see P092), MALIK (see P050), MAREVAN (see P001), MAR-FIN (see P001), MARTIN'D MAR-FRIN (see P001), MAVERAN (see P001), MEGATOX (see P005)
--	MERSOLITE (see P092), METACID 50 (see P071), METAFOS (see P071), METAPHOR (see P071), METHPHOS (see P071), METASOL 30 (see P092)
P066	Methomyl
P067	2-Methylaziridine, METHYL-E 605 (see P071)
P068	Methyl hydrazine, Methyl isocyanate (see P064)
P069	2-Methyllactonitrile
P070	2-Methyl-2-(methylthio) propionaldehyde-o-(methylcarbonyl) oxime, METHL NIRON (see PO42)
P071	Methyl parathion, METRON (see P071), MOLE DEATH (see P108), MOUSE-NOTS (see P108), MOUSE-RID (see P108), MOUSE-TOX (see P108), MUSCIMOL (see P007)
P072	1-Naphthyl-2-thiourea
P073	Nickel carbonyl
P074	Nickel cyanide
P075	Nicotine and salts
P076	Nitric oxide
P077	p-Nitroaniline
P078	Nitrogen dioxide

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P082	N-Nitrosodimethylamine
P084	N-Nitrosomethylvinylamine, NYLMERATE (see P092), OCTALOX (see P037)
P085	Octamethylpyrophosphoramide, OCTAN (see P092)
P087	Osmium tetroxide
P088	7-Oxabicyclo (2.2.1) heptane-2,3-dicarboxylic acid, PANIVARFIN (see P001), PANORAM D-31 (see P037), PANATHERINE (see P007), PANWARFIN (see P001)
P089	Parathion, PCP (see P090), PENNCAP-M (see P071), PENOXYL CARBON N (see PO48)
P092	Phenylmercury acetate
P093	N-Phenylthiourea, PHILIPS 1861 (see P008), PHIX (see P092)
P094	Phorate
P095	Phosgene
P096	Phosphine
P097	Phosphorothioic acid, 0,0-dimethyl ester, 0-ester with N,N-dimethyl benzene sulfonamide, Phosphorothioic acid 0,0-dimethyl-0-(p-nitrophenyl) ester (see P071), PIED PIPER MOUSE SEED (see P108)
P098	Potassium cyanide
P099	Potassium silver cyanide, PERMERGE (see P020)
P101	Propanenitrile
P102	2-Propyn-l-ol-PROTHROMADIN (see P001), QUICKSAM (see P092), QUINTOX (see P037), RAT AND MICE BAIT (see P100), RAT-A-WAT (see P001), RAT-B-GON (see P001), RAT-O-CIDE #2 (see P001), RAT GUARD (see P001), RAT-KILL (see P001), RAT-MIX (see P001), RATS-NO-MORE (see P001), RAT-OLA (see P001), RATOREX (see P001), RATTUNAL (see P001), RAT-TROL (see P001), RO-DETH (see P001), RO-DEX (see P108), ROSEX (see P001), ROUGH and READY MOUSE MIX (see P001), SANASEED (see P108), SANTOBRITE (see P090), SANTOPHEN (see P090), SANTOPHEN 20 (see P090), SCHRADAN (see P085)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P103	Selenourea
P104	Silver cyanide, SMITE (see P105), SPARIC (see P020), SPOR-KIL (see P092), SPRAY-TROL BRAND RODENTROL (see P001), SPURGE (see P020)
P105	Sodium azide, Sodium coumadin (see P001)
P106	Sodium cyanide, SODIUM WARFARIN (see P001), SOLFARIN (see P001), SOLFOBLACK BB (see PO48), SOLFOBLACK SE (see PO48)
P108	Strychnine and salts, SUBTEX (see P020), SYSTAM (see P085), TAG FUNGICIDE (see P092), TEKWAISA (see P071), TEMIC (see P070), TEMIK (see P070), TERM-I-TROL (see P090)
P109	Tetraethyldithiopyrophosphate
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
--	Tetraphosphoric acid, hexaethyl ester (see P062), TETROSULFUR BLACK PB (see PO48), TETROSULPHUR PBR (see PO48)
P112	Tetranitromethane
P113	Thallic oxide, Thallium peroxide
P114	Thallium selenate
P115	Thallium (1) sulfate, THIFOR (see P092), TH1MUL (see P092), THIODAN (see P050), THIOFOR (see P050), TH1OMUL (see P050), TH1ONEX (see P050), THIOPHENIT isee P071)
P116	Thiosemicarbazide, Thiosulfantionel (see P050)
P118	Trichloromethanethiol, TWIN LIGHT RAT AWAY (see P001), USAF RH-8 (see P069), USAF-EK-4890 (see P002)
P119	Vanadic acid, ammonium salt
P120	Vanadium pentoxide, VOFATOX (see P071), WANADU, WARCOUMIN (see P001), WARFICIDE (see P001), WARFARIN SODIUM (see P001), WOFOTOX (see P072), YANOCK (see P057), YASOKNOCK (see P058), ZIARNIK (see P092)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P121	Zinc cyanide
--	ZOOCOUMARIN (see P001)
P122	Zinc Phosphide
P123	Toxaphen
P127	Carbofuran, 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-, methylcarbanate
P128	Phenol, 4-(dimethylamino)-3,5-dimethyl-, methylcarbamate (ester), Mexacarbate
P185	Tirpate, 1,3-Dithiolane-2-carboxaldehyde, 2,4-dimethyl-, 0-Rmethylamino)- carbonyllo,dme
P188	Benzoic acid, 2-hydroxy-, compd. with (3a5-cis)-1,2,3,3a,8,8a-hexahydro1,3a,8-trimethylpyrrolo[2,3-b]indo1-5-y1 methylcarbamate ester (1:1), Physostigmine salicylate
P189	Carbosulfan, Carbamic acid, [(dibutylamino)- thiolmethyl-, 2,3-dihydro-2,2- dimethyl- 7-benzofuranyl ester
P190	Metolcarb, Carbamic acid, methyl-, 3-methylphenyl ester
P191	Dimetilan, Carbamib acid, dimethyl-, 1-[(dimethyl-amino)carbony1]-5-methy1- 1H-pyrazol-3-y1 ester
P192	Isolan, Carbamic acid, dimethyl-, 3-methyl-1- (1-methylethyl)-1H- pyrazol-5-yl ester
P194	Oxamyl, Ethanimidothioc acid, 2-(dimethylamino)-N-[[(methylamino) carbonyl]oxy]-2-oxo-, methyl ester
P196	Manganese dimethyldithiocarbamate, Mangenese, bis(dimethylcarbamodithioato-S,S')-
P197	Formparanate, Methanimidamide, N,N-dimethyl-N'-[2-methy1-4- [[(methylamino)carbonyl]oxylphenyll-
P198	Formetanate hydrochloride, Methanimidamide, N,N-dimethyl-N'[3- [[(methylamino)-carbonyl]oxylphenyll-, monohydrochloride
P199	Methiocarb, Phenol, (3,5-dimethy1-4-(methylthio)-, methylcarbamate

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
P201	Promecarb, Phenol, 3-methyl-5-(1-methylethyl)-, methyl carbamate
P202	m-Ctunenyl methylcarbamate, 3-Isopropylphenyl N-methylcarbamate, Phenol, 3-(1-methylethyl)-, methyl carbamate
P203	Aldicarb sulfone, Propanal, 2-methyl-2-(methyl-sulfonyl)-, 0-[(methylamino)carbonyl] oxime
P204	Physostigmine, Pyrrolo[2,3-b]indol-5-ol, 1,2,3,3a,8,8a-hexahydro-1,3a,8- trimethyl-,methylcarbamate (ester), (3aS-cis)-
P205	Ziram, Zinc, bis(dimethylcarbamodithioato-S-S')-
U001	Acetaldehyde (I)
U002	Acetone (I)
U003	Acetophenone (I,T)
U004	Acetophenone
U005	2-Acetylaminoflourene
U006	Acetyl chloride (C,R,T)
U007	Acrylamide, Acetylene tetrachloride (see U209), Acetylene trichloride (see U228)
U008	Acrylic acid (I)
U009	Actylonitrile, AEROTHENE TT (see U226), 3-Amino-5-(p-acetamindophenyl) 1H-1,2,4-triazole, hydrate (see U011)
U010	6-Amino-1, 1a,2,8,8a,8b-hexahydro-8-(hydroxymethyl), 8-methoxy-5-methylcarbamate, azirino (2,3,3,4) pyrrolo (1,2-a) indole-4,7-dione (ester)
U011	Amitrole
U012	Aniline (I)
U014	Auramine
U015	Azaserine
U016	Benz[c]acridine

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U017	Benzal chloride
U018	Benz[a]anthracene
U019	Benzene
U020	Benzenesulfonyl chloride (C,R)
U021	Benzidine, 1,2-Benzisothiazolin-3-one, 1,1-dioxide (see U202), Benzo [a] anthracene (see U018)
U022	Benzo[a]pyrene
U023	Benzotrichloride (C,R,T)
U024	Bis(2-chloroethoxy) methane
U025	Bis(2-chloroethyl) ether
U026	N,N-Bis(2-chloroethyl)-2-napthylamine
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U029	Bromomethane
U030	4-Bromophenyl phenyl ether
U031	n-Butyl alcohol (I)
U032	Calcium chromate, Carbolic acid (see U188), Carbon tetrachloride (see U211)
U033	Carbonyl fluoride
U034	Chloral
U035	Chlorambucil
U036	Chlordane
U037	Chlorobenzene
U038	Chlorobenzilate
U039	p-Chloro-m-cresol
U041	1-Chloro-2,3-epoxypropane, CHLOROETHENE NU (see U226)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U042	2-Chloroethyl vinyl ether
U043	Chloroethene
U044	Chloroform (I,T)
U045	Chloromethene (I,T)
U046	Chloromethyl methyl ether
U047	2-Chloronaphthalene
U048	2-Chlorophenol
U049	4-Chloro-o-toluidine, hydrochloride
U050	Chrysene, C.I. 23060 (see U073)
U051	Creosote
U052	Cresols
U053	Crotonaldehyde
U055	Cumene, Cyanomethane (see U003)
U056	Cyclohexane (I)
U057	Cyclohexanone (I)
U058	Cyclophosphamide
U059	Daunomycin
U060	DDD
U061	DDT
U062	Diallate
U063	Dibenz[a,h]anthracene, Dibenzo[a,h]anthracene
U064	Dibenzo[a,i]pyrene
U066	1,2-Dibromo-3-chloropropane
U067	1,2-Dibromoethane

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U068	Dibromomethane
U069	Di-n-butyl phthalate
U070	1,2-Dichlorobenzene
U071	1,3-Dichlorobenzene
U072	1,4-Dichlorobenzene
U073	3,3-Dichlorobenzidine
U074	1,4-Dichloro-2-butene 3,3-Dichloro-4,4,diaminobiphenyl (see U073)
U075	Dichlorodifluoromethane
U076	1,1-Dichloroethane
U077	1,2-Dichloroethane
U078	1,1-Dichloroethylene
U079	1,2-trans-dichloroethylene
U080	Dichloromethane, Dichloromethylbenzene (see U017)
U081	2,4-Dichlorophenol
U082	2,6-Dichlorophenol
U083	1,2-Dichloropropane
U084	1,3-Dichloropropane
U085	Diepoxybutane (I,T)
U086	1,2 Diethylhydrazine
U087	0,0-Diethyl-S-methyl ester of phosphorodithioic acid
U088	Diethyl phthalate
U089	Diethylstilbestrol
U090	Dihydrosafrole

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U091	3,3-Dimethylbenzidine
U092	Dimethylamine (I)
U093	p-Dimethylaminoazobenzene
U094	7,12-Dimethylbenz[a]anthracene
U095	3,3-Dimethylbenzidine
U096	alpha, alpha-Dimethylbenzylhyroperoxide (R)
U097	Dimethylcarbamoyl chloride
U098	1,1-Dimethylhydrazine
U099	1,2-Dimethylhydrazine
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U106	2,6-Dinitrotoluene
U107	Di-n-octyl phthalate
U108	1,4-Dioxane
U109	1,2-Diphenylhydrazine
U110	Dipropylamine (I)
U111	Di-N-propylnitrosamine, EBDC (see U114), 1,4-Epoxybutane (see U213)
U112	Ethyl acetate
U113	Ethyl acrylate (I)
U114	Ethylenebisdithiocarbamate
U115	Ethylene oxide (I,T)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U116	Ethelene thiourea
U117	Ethyl ether (I,T)
U118	Ethylmethacrylate
U119	Ethyl methanesulfonate, Ethylnitrile (see U003), Firemaster and 23P (see U235)
U120	Fluoranthene
U121	Fluorotrichloromethane
U122	Formaldehyde
U123	Formic acid (C,T)
U124	Furan (I)
U125	Furfural (I)
U126	Glycidyladehyde
U127	Hexachlorobenzene
U128	Hexachlorobutadiene
U129	Hexachlorocyclohexane
U130	Hexachlorocyclopentadiene
U131	Hexachloroethane
U132	Hexachlorophene
U133	Hydrazine (R,'F)
U134	Hydrofluoric acid (C,T)
--	Hydroxybenzene (see U188)
U135	Hydrogen Sulfide
U136	Hydroxydimethylarsine oxide, 4,4-(1-midocarbonyl) bis(N,N-dimethypaniline (see U014)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U137	Indeno(1,2,3-cd)pyrene
U138	Iodomethane
U140	Isobutyl alcohol (I,T)
U141	Isosafrole
U142	Kepone
U143	Lasiocarpine
U144	Lead acetate
U145	Lead phosphate
U146	Lead subacetate
U147	Maleic anhydride
U148	Maleic hydrazide
U149	Malononitrile, MEK peroxide (see U160)
U150	Melphalan
U151	Mercury
U152	Methacrylonitrile (I,T)
U153	Methanethiol (I,T)
U154	Methanol (T)
U155	Methapyrilene, Methyl alcohol (see U154)
U156	Methyl chlorocarbonate (I,T), Methyl chloroform (see U226)
U157	3-Methylcholanthrene, Methyl chioroformate (see U156)
U158	4,4-Methylene-bis-(2-chloroaniline)
U159	Methyl ethyl ketone (MEK) (I,T)
U160	Methyl ethyl ketone peroxide (R,T), Methyl iodide (see U138)
U161	Methyl isobutyl ketone (I)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U162	Methyl methacrylate (I,T)
U163	N-Methyl-N-nitro-N-nitrosoguanidine
U164	Methylthiouracil, Mitronycin C (see U010)
U165	Naphthalene
U166	1,4-Naphthaquinone
U167	1-Naphthylamine
U168	2-Naphthylamine
U169	Nitrobenzene (I,T), Nitrobenzol
U170	4-Nitrophenol
U171	2-Nitropropane (I)
U172	N-Nitrosodi-n-butylamine
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U176	N-Nitroso-N-ethylurea
U177	N-Nitro-N-methyl urea
U178	N-Nitroso-N-methylurethane
U179	N-Nitrosopiperidine
U180	N-Nitrosopyrrolidine
U181	5-Nitro-o-toluidine
U182	Paraldehyde, PCNB (see U185)
U183	Pentachlorobenzene
U184	Pentachloroethane
U185	Pentachloronitrobenzene
U186	1,3-Pentadiene (I), Perc (see U210), Perchloroethylene (see U210)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U187	Phenacetin
U188	Phenol
U189	Phosphorous sulfide (R)
U190	Phthalic anhydride
U191	2-Picoline
U192	Pronamide
U193	1,3-Propane sultone
U194	n-Propylamine (I,T)
U196	Pyridine
U197	Quinones
U200	Reserpine
U201	Resorcinol
U202	Saccharin and salts
U203	Safrole
U204	Selenious acid
U205	Selenium sulfide (R,T), Silvex (see U233)
U206	Streptozotocin, 2,4,5-T (see U232)
U207	1,2,4,5-Tetrachlorobenzene
U208	1,1,1,2-Tetrach1oroethane
U209	1,1,2,2-Tetrachloroethane
U210	Tetrachioroethene, Tetrachioroethylene
U211	Tetrachioromethane
U213	Tetrahydrofuran (I)

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U214	Thallium acetate (I)
U215	Thallium carbonate (I)
U216	Thallium chloride (I)
U217	Thallium nitrate (I)
U218	Thioacetamide
U219	Thiourea
U220	Toluene
U221	Toluenediamine
U222	o-Toluidine hydrochloride
U223	Toluene diisocyanate (R,T)
U225	Tribromomethane
U226	1,1,1-Trichloroethane
U227	1,1,2-Trichloroethane
U228	Trichloroethene, Trichloroethylene
U234	sym-Trinitrobenzene (R,T)
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U237	Uracil mustard
U238	Urethane, Vinyl chloride (see U043), Vinylidene chloride (see U078)
U239	Xylene (I)
U240	2,4,4 D, salt and esters
U243	Hexachloropropene
U244	Thiram

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U246	Bromine Cyanide
U247	Methoxychlor
U248	Warfarin & Salts (<0.3%)
U249	Zinc Phosphide (<10%)
U271	Carbamic acid, [14(butylamino)carbony11-1H-benziinidazol-2-y1]-, methyl ester
U278	Bendiocarb
U279	Carbaryl, 1-Naphthalenol, methylcarbamate
U280	Barban, Carbamic acid, (3-chloropheny1)-, 4-chloro-2-butynyl ester
U328	o-Toluidine
U353	p-Toluidine
U359	Ethylene glycol monoethyl ether
U364	Bendiocarb phenol, 1,3-Benzodioxol-4-ol, 2,2-dimethyl-
U367	Carbofuran phenol, 7-Benzofuranol, 2,3-dihydro-2,2-dimethyl-
U372	Carbendazim, Carbamic acid, 1H-benzimidazol-2-yl, methyl ester
U373	Propham, Carbamic acid, phenyl-, 1-methylethyl ester
U387	Prosulfocarb, Carbamothioic acid, dipropyl-, S-(phenylmethyl) ester
U389	Triallate, Carbamothioic acid, bis(1-methylethy1/0-, S-(2,3,3-trichloro-2- propenyl) ester
U394	A2213, Ethanimidothioic acid, 2-(dimethylamino)-N-hydroxy-2-oxo-, methyl ester
U395	Diethylene glycol, dicarbamate, Ethanol, 2,2'-oxybis-, dicarbamate
U404	Triethylamine, Ethanamine, N,N-diethyl-
U409	Thiophanate-methyl, Carbamic acid, [1,2-phenylenebis (iminocarbonothioyl)]bis-, dimethyl ester

TABLE 4-7 (Continued)

DISCARDED COMMERCIAL PRODUCTS RECEIVED AT VEOLIA

EPA Hazardous Waste No.	Substance
U410	Thiodicarb, Ethanimidothioic acid, N-N'Rhiobis[(methylimino)carbonyloxy]]bis-, dimethyl ester
U411	Propoxur, Phenol, 2-(1-methylethoxy)-, methylcarbamate

TABLE 4-8

LISTED HAZARDOUS WASTES THAT WILL BE MANAGED ON A CASE-BY-CASE BASIS AT THE VEOLIA FACILITY

EPA ID NO.	SUBSTANCE	REASON
K044	Wastewater treatment sludges from the manufacturing and processing of explosives	Reactive
K045	Spent carbon from the treatment of wastewater containing explosives	Reactive
K047	Pink/red water from TNT operations	Reactive
P009	Ammonium picrate	Reactive
U234	1,3,5-Trinitrobenzene	Reactive

LISTED HAZARDOUS WASTES THAT WILL NOT BE MANAGED AT THE VEOLIAFACILITY

EPA ID NO.	SUBSTANCE	REASON
P031	Cyanogen	Compressed gas
P033	Cyanogen chloride	Compressed gas
P056	Fluorine	Compressed gas
P063	Hydrogen cyanide	Compressed gas
P065	Fulminic acid, mercury (II) salt	Reactive
P081	Nitroglycerine	Reactive
P095	Phosgene	Compressed gas
P096	Phosphine	Compressed gas
P112	Tetranitromethane	Reactive

T A B L E 4 - 9

DRUM STORAGE CONTAINER SCHEDULE

Bay Number	Containers Per Bay (55-gallon Equivalence)	Maximum Storage Per Bay (gallons)	Total Containment Available Per Bay (gallons)	Containment Required: 10% of Storage (gallons)
1	96	5280	557	528
2	96	5280	557	528
3	192	10,560	1136	1056
4	192	10,560	1067	1056
5	144	7920	820	792
6	96	5280	557	528
7	192	10,560	1136	1056
8	192	10,560	1067	1056

TABLE 4-10
SEGREGATION TABLE FOR HAZARDOUS MATERIALS

Class or Division	Note	1.1 1.2	1.3	1.4	1.5	1.6	2.1	2.2	2.3 Gas Zone A	2.3 Gas Zone B	3	4.1	4.2	4.3	5.1	5.2	6.1 Liquid PG I Zone A	7	8 Liquid Only
Explosives 1.1 & 1.2	A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X
Explosives 1.3		*	*	*	*	*	X		X	X	X		X	X	X	X	X		X
Explosives 1.4		*	*	*	*	*	O		O	O	O		O				O		O
Very Insensitive Explosives 1.5	A	*	*	*	*	*	X	X	X	X	X	X	X	X	X	X	X	X	X
Extremely Insensitive Explosives 1.6		*	*	*	*	*													
Flammable Gases 2.1		X	X	O	X				X	O							O	O	
Non-Toxic, Non-Flammable Gases 2.2		X			X														
Poisonous Gas Zone A 2.3		X	X	O	X		X				X	X	X	X	X	X			X
Poisonous Gas Zone B 2.3		X	X	O	X		O				O	O	O	O	O	O			O
Flammable Liquids 3		X	X	O	X				X	O					O		X		
Flammable Solids 4.1		X			X				X	O							X		O
Spontaneously Combustible Materials 4.2		X	X	O	X				X	O							X		X
Dangerous When Wet Materials 4.3		X	X		X				X	O							X		O
Oxidizers 5.1	A	X	X		X				X	O	O						X		O
Organic Peroxides 5.2		X	X		X				X	O							X		O
Poisonous Liquids PG I Zone A 6.1		X	X	O	X		O				X	X	X	X	X	X			X
Radioactive Materials 7		X			X		O												
Corrosive Liquids 8		X	X	O	X				X	O		O	X	O	O	O	X		

TABLE 4-11

STABILIZATION FACILITY EQUIPMENT DATA

Equipment Item	Description
Pug Mill System	Mixing system including reagent silo. Completely frame mounted with walkways and handrails. Pug mill and silo are all carbon steel construction.
Shredder System	Saturn Model 62-40 low-speed, high-torque shredder. Features: (2) 150 HP 460 volt three phase 60 Hz motors, 11 cutters per shaft, two shafts, two inch standard knife thickness.
Waste Storage Silo	Vertical, cylindrical bolted silo 11'4" diameter with 60 degree cone bottom, 1470 cubic foot capacity, skirted lower section. Carbon Steel construction, rotary valve on discharge.

Note: Reference to specific equipment manufacturers or brand names represents current equipment. Maintenance activities may result in installation or replacement equipment/parts having similar but not identical specifications.

TABLE 4-12

CALCULATIONS FOR CAPACITY OF SECONDARY CONTAINMENT SYSTEM
FOR THE VEOLIA STABILIZATION UNIT

TOTAL CONTAINMENT CAPACITY	LENGTH (ft)	WIDTH (ft)	DEPTH (ft)	Capacity (ft^3)	Capacity (gal.)
Dimensions of New Concrete Slab (Above Grade)	85	77	0.417	2729	20407
Dimensions of New Concrete Slab (Below Grade)	85	77	0.802	2624	19622
Dimensions of Concrete Slab (Above Grade)	61.1	56.5	0.500 (1)	1439	10762
Dimensions of Concrete Slab (Below Grade)	61.1	56.5	0.417 (1)	863	6452
Capacity of Containment Sumps (two)	10	8	5.917 (2)	947	7080
Less Area of Steel Bin	14	25	0.917	-321	-2400
Less Area of Concrete Slab for Backhoe	21.5	16	0.917	-315	-2359
TOTAL AVAILABLE STORAGE CAPACITY					59564
TOTAL POTENTIAL NEED (24-hour 25-year rain)					
Dimensions of one 20 yd Roll-off Loading Area				540	4039
Capacity of Storage Silo				1470	10993
TOTAL CONTAINMENT REQUIRED					23194

ASSUMPTIONS:

1. 1 CUBIC FT = 7.481 GALLONS
2. AMOUNT OF RAINWATER FROM A 25 YEAR, 24 HOUR STORM = 4.5 INCHES

NOTES

1. The concrete slab has a 5” curb on its south end. The south side of the concrete slab is a high point, sloping down to the north. The remaining sides of the concrete slab have an 11” curb.
2. The containment sumps are 5 ‘ deep with an 11” curb.
3. The roll-off area has a 5” curb.

12/20/12

TABLE 4-13

PREVENTATIVE MEAINTENANCE OF THE STABILIZATION UNIT

DAILY:

1.) Check oil level of compressor.
2.) Clean all equipment.
3.) Clean all cooling air intakes of motors.
4.) Grease all bearings of pulleys, motors, and pugmill shafts.

WEEKLY:

1.) Grease chain of rotary vane.
2.) Gently clean the sensing plate of the solids (cement) flow sensor by using a spackling knife or spatula.

MONTHLY:

1.) Check solids flow sensor for wearing of the sensing plate.
2.) Calibrate solids flow sensor.

AS NEEDED:

1.) Check oil in gear boxes and in reducers.
NOTE: The oil level on all reducers should be checked on a periodic basis, and adjusted as necessary. Under average operating conditions, the lubricant should be changed every 2500 hours of operation, or every six months, whichever comes first.
2.) Change filter in air dryer.
3.) Add dessicant in the air dryer.
4.) Check linearity of solids flow meter.
5.) Replace dust laden filter bags in the baghouses.
6.) Check all nuts and bolts for wear and tightness.
7.) Every 500 hours of operation, grease rotoflow bearings (rotary vane / rotary airlock feeders).
8.) Inspect all motors for excessive dirt, friction, or vibration damage periodically. Ventilation openings should be kept clear to allow ininterrupted air flow. Compressed air may be used to blow dust from inaccessible locations.Make certain drain holes are kept open.

TABLE 4-14

CALCULATION FOR CAPACITY OF CONTAINMENT SYSTEM
SOUTHEAST CONTAINER STORAGE UNIT
EAST SECTION

TOTAL CONTAINMENT CAPACITY	LENGTH FEET	WIDTH FEET	DEPTH FEET	VOLUME CUBIC FEET	VOLUME GALLONS
CONTAINMENT AREA	130	26	1.92	3,244.80	24,274.35
TRENCH	125	1.25	1.65	257.81	1,928.68
SUMP	3	3	3.92	35.28	263.93
TOTAL CONTAINMENT AVAILABLE				3,537.89	26,466.96
RAIN ACCUMULATION	130	26	0.375	1,267.50	9,482.17
10 PERCENT OF STORED WASTE				972.00	7,271.53
CONTAINER DISPLACEMENT(12)	16.57	8	1.12	890.80	6,664.07
TOTAL CANTAINMENT REQUIRED				3,130.30	23,417.77

ASSUMPTIONS
1. 1 CUBIC FOOT = 7.481 GALLONS
2. AMOUNT OF RAINWATER FROM A 25 YEAR, 24 HOUR STORM = 4.5 INCHES
3. MAXIMUM STORAGE 12-30 CU YD ROLL-OFF CONTAINERS

CONCLUSION: THE CONTAINMENT CAPACITY MEETS THE REQUIREMENTS OF THE WISCONSIN ADMINISTRATIVE CODE.

TABLE 4-15

CALCULATION FOR CAPACITY OF CONTAINMENT SYSTEM
SOUTHEAST CONTAINER STORAGE UNIT
CENTER SECTION

TOTAL CONTAINMENT CAPACITY	LENGTH FEET	WIDTH FEET	DEPTH FEET	VOLUME CUBIC FEET	VOLUME GALLONS
CONTAINMENT AREA	130	49	1.92	6,115.20	45,747.81
TRENCH	125	1.25	1.65	257.81	1,928.68
SUMP	3	3	3.92	35.28	263.93
TOTAL CONTAINMENT AVAILABLE				6,408.29	47,940.42
RAIN ACCUMULATION	130	49	0.375	2,388.75	17,870.24
10 PERCENT OF STORED WASTE				1944.00	14,543.06
CONTAINER DISPLACEMENT(24)	16.57	8	1.12	1,781.61	13,328.22
TOTAL CONTAINMENT REQUIRED				6,114.36	45,741.52

ASSUMPTIONS
1. 1 CUBIC FOOT = 7.481 GALLONS
2. **AMOUNT OF RAINWATER FROM A** 25 YEAR, 24 HOUR STORM = 4.5 INCHES
3. MAXIMUM STORAGE CAPACITY 24-30 CU YD ROLL-OFF CONTAINERS

CONCLUSION: THE CONTAINMENT CAPACITY MEETS THE REQUIREMENTS OF THE WISCONSIN ADMINISTRATIVE CODE.

TABLE 4-16

CALCULATION FOR CAPACITY OF CONTAINMENT SYSTEM
SOUTHEAST CONTAINER STORAGE UNIT
SOUTH SECTIONS

TOTAL CONTAINMENT CAPACITY	LENGTH FEET	WIDTH FEET	DEPTH FEET	VOLUME CUBIC FEET	VOLUME GALLONS
CONTAINMENT AREA	64	26	1.92	1,597.44	11,950.45
TRENCH	58	1.25	1.3	94.25	705.08
SUMP	3	3	3.92	35.28	263.93
CONTAINMENT AVAILABLE, EACH				1,726.97	12,919.46
TOTAL CONTAINMENT SOUTH SECT				3,453.94	25,838.92
RAIN ACCUMULATION	64.17	26	0.375	625.66	4,680.56
10 PERCENT OF STORED WASTE				486.00	3,635.77
CONTAINER DISPLACEMENT(6)	16.57	8	1.12	445.40	3,332.04
CONTAINMENT REQUIRED, EAST				1,557.06	11,648.37
CONTAINMENT REQUIRED, WEST				1,557.06	11,648.37
CONTAINMENT REQUIRED, TOTAL				3,114.12	23,296.74

ASSUMPTIONS
1. 1 CUBIC FOOT = 7.481 GALLONS
2. AMOUNT OF RAINWATER FROM A 25 YEAR, 24 HOUR STORM = 4.5 INCHES
3. MAXIMUM STORAGE CAPACITY IN TWO SECTIONS 12-30 CU YD ROLL-OFF CONTAINERS

CONCLUSION: THE CONTAINMENT CAPACITY MEETS THE REQUIREMENTS OF THE WISCONSIN ADMINISTRATIVE CODE.

S E C T I O N V

PROCEDURES TO PREVENT HAZARDS

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

5.0 PROCEDURES TO PREVENT HAZARDS

This section describes the security and emergency procedures and equipment used at the Veolia ES Technical Solutions, L.L.C. – Menomonee Falls, WI (Veolia – Menomonee Falls) facility. It also summarizes the site Inspection Plan followed to minimize potential site hazards. The procedures, structures and equipment used by the facility to minimize spills during waste transfer, to prevent run-off or run-on from interfering with site operations or contaminating the environment, and to mitigate the effects of equipment failure are described. Finally, the techniques used to manage ignitable, reactive and incompatible wastes in each management unit are discussed. This information is presented in accordance with 40 CFR 270.14 (b) (4) through (9), 270.15, and 270.16 and s. NR 670.014(2)(d) through (i), 670.015, and 670.016.

5.1 Security Procedures and Equipment

Veolia – Menomonee Falls will comply with the requirements stipulated in 40 CFR 264.14 and s. NR 664.0014.

5.1.1 Means to Control Entry

The facility is entirely fenced with a 6-foot high chain-link fence. The east fence line has two vehicle gates. The gates are monitored by closed-circuit video surveillance system and are opened and closed to permit entry (and egress) of waste delivery trucks and other authorized vehicles. The west, north and south fence lines each have vehicle gates. These are normally kept closed and locked during operating hours. All of the facility gates will be kept closed and locked during non-operating hours.

During operating hours, all persons entering the facility are required to either (1) enter the office building, state their business to the receptionist, and sign a visitor's log or (2) in the case of waste

or materials delivery trucks, stop at the receiving station in the office building and have the delivery accepted (or tentatively accepted in the case of waste deliveries). All non-complying entrants are treated as unauthorized entrants and are asked to leave the facility. Unauthorized entrants are detected by facility personnel who maintain visual surveillance of the facility.

During non-operating hours, the fence and locked gates control unauthorized entry to the facility. Drivers of trucks delivering wastes to the facility are given specific instructions at the receiving station about where to proceed within the facility to be sampled and off-loaded. All waste off-loading is conducted under the supervision of designated personnel.

Drivers of trucks delivering supplies, non-waste materials and service vehicles also are directed to their destinations on the facility by receiving station personnel. At their destination, they are under the visual surveillance of facility personnel.

Contractors, consultants, visitors, and other non-employee personnel authorized to enter the facility normally are accompanied by facility personnel while on the premises. Possible exceptions may occur where an individual has a prolonged and very specific job to perform in a specific area of the facility (e.g. building construction or maintenance). In these cases, facility personnel familiarize the person with the facility and safety/emergency procedures to be followed while on site.

5.1.2 Warning Signs

Signs are posted at all points of entry to the facility and at 50-foot intervals on the perimeter fencing. The signs can be seen when approaching the facility at a distance of 25 feet, and are written in English, and contain the words "Danger - Unauthorized Personnel Keep Out".

5.1.3 Required Emergency Equipment

The emergency equipment at the facility is indicated on Figure 7-2 in Section 7.0, and is listed in Table 5-1. This table includes the location and physical description of each item and a brief outline of its capabilities. Equipment on the list includes fire extinguishers and extinguishing systems, spill control equipment,

communications and alarm systems, and decontamination equipment. This equipment is further described in the following subsections. The use of the equipment and emergency systems are fully described in the Contingency Plan (Section 7.0).

5.1.4 Internal Communications

Within the facility, telephones, two-way radios, and/or a public address system provide internal communications for the Administration Building, Container Storage Unit, Roll-Off Box/LuggerBox Storage Unit, Waste Stabilization Unit and the Repack/Bulking/Decant Unit.

An alarm is installed in the Container Storage Unit, Waste Stabilization Unit, Drum Repack/Bulking/Decant Unit, Office, and the Laboratory that can be used to warn personnel throughout the facility of an emergency. The alarm is an audible alarm that can be activated from any of the above locations and can be heard throughout the facility. Fire alarms are installed in the Administration Building, Maintenance Building, Container Storage Unit, and Repack/Bulking/Decant Unit.

5.1.5 External Communications

The location of the telephones in the facility is shown in Figure 7-2 in Section 7.0. The facility's telephone system will provide external communications for the purpose of calling for outside assistance if and when needed.

5.1.6 Fire Control Equipment

Because chemical fires are the most likely type of fires that might occur at the facility, appropriate fire extinguishers are the most effective means of suppressing fires. Fire extinguishers are located throughout the facility, and a 150-pound extinguisher on a two-wheel truck is available to respond to fires (see Figures 7-2 in the Contingency Plan Section 7.0). The Container Storage Unit is equipped with an automatic fire suppression sprinkler system. The primary protection unit will be the Menomonee Falls Fire Department. A fire suppression sprinkler system is installed in the Administration Building, Maintenance Building, and the Repack/Bulking/Decant Unit. The facility has two fire hydrants which are located 245 feet east and 20 feet west of the north gate.

Water will be used to cool areas adjacent to a fire. Water will be supplied by the Fire Department's pumpers and the Village of Menomonee Falls water supply.

5.1.7 Spill Control Equipment

Portable pumps, empty containers, and absorbent materials are employed to respond to potential spills at the facility. Engineered secondary containment systems provide for control of released material. In the unlikely event of any major transportation spills or major spills of containerized wastes that cannot be handled by these supplies and equipment, Veolia – Menomonee Falls has access to 5,000-gallon vacuum trucks and other equipment from The Veolia Transportation Division and outside contractors.

Veolia – Menomonee Falls maintains several portable pumps and transfer hoses sufficient to respond to any transportation spills and to remove spilled wastes (and rainwater) from containment systems. Spill control is provided principally by the engineered containment systems for all the regulated units. Therefore, spill control equipment will be needed principally for the purpose of removing spilled wastes from these systems and to respond to any transportation spills.

5.1.8 Loading and Unloading Stations

Trucks delivering or picking up containerized wastes at the Container Storage Unit, Stabilization building, and Repack/Bulking/Decant Unit back into sloped containment systems fronting the unloading docks. This system (1) contains any leaks or spills from unloading/loading operations, and (2) positions the truck/trailer bed at the same level as the floor of the loading/unloading dock. Forklift trucks, hand carts, and drum dolly's are employed to move the containers to and from the delivery trucks. Because loading/unloading operations are facilitated by this design, damage to or dropping of containers and any attendant spills of wastes is minimized.

Employees working on docks will maintain communication with drivers who position trucks and trailers at the docks. All vehicle movements to or from any dock will be communicated to ensure all employees involved are aware of the vehicle movements. All trailers that do not have a drive

tractor attached to it will have wheel chocks placed in front of the rear tires to prevent forward movement of the trailer. In addition, jack stands are placed under the front end of the trailer.

All employees who operate forklifts at the facility must complete training on the proper safe operation of forklifts. This training is completed prior to any operation on site. In addition, all forklifts are equipped with horns and back-up alarms to make their presence known to other employees in the area.

5.1.9 Testing and Maintenance of Equipment

Table 3-3 of the Inspection Plan (see Appendix A) sets forth the inspection schedule for testing and maintaining the preparedness of safety and emergency equipment. As shown, all communication systems will be checked daily, the alarm system will be checked weekly, and fire extinguishers and fire equipment will be checked weekly and monthly. In addition, as provided in the Contingency Plan, all fire, safety, and emergency equipment will be inspected and returned to full operating order, as necessary, after each emergency. Repair and replacement of such equipment is performed as a result of the identification of the need for repair or replacement.

5.1.10 Aisle Space

In the facility, all of the regulated units are accessible to fire and spill response equipment. There is adequate access into the Container Storage Unit through a large door (at the northwest corner) and through the three large doors on the loading dock.

Within the Container Storage Units, containers are arranged in groups, with a minimum aisle space of 2'6" between containers in each group to allow for easy inspection. In addition, each group of containers will be separated from adjacent containers by minimum 6-foot wide aisles to allow easy access for fork-lift trucks. Ample aisle space is maintained in the Repack/Bulking/Decant Building to provide access to fire and spill control equipment. In the Waste Stabilization and Storage Building and Southeast Container Storage Unit there is ample

spacing between containers to provide adequate access throughout the buildings by authorized personnel.

5.2 Procedures, Structures, and Equipment to Prevent Hazards

At the facility, all storage, treatment, and loading/unloading of wastes is conducted in units having secondary containment systems. In addition, all storage of containerized wastes and all Repack/Bulking/Decant of wastes is conducted inside of buildings or within secondary containment. These containment systems and buildings prevent site contamination.

All loading and unloading of hazardous waste is conducted in containment systems. Any wastes that leak onto the containment system are immediately removed.

The unloading of waste delivery trucks and dispatching of waste transfer trucks is scheduled to minimize the residency time of loaded trucks at the facility. Additionally, as described above, all unloading/loading operations are conducted within containment systems.

Based on the foregoing, Veolia – Menomonee Falls believes that site contamination is and will be negligible and does not require treatment of stormwater runoff from the facility.

5.2.1 Water Supplies

Since the facility does not dispose of hazardous wastes on-site and because all waste unloading/loading, storage and treatment operations are conducted inside of engineered containment systems to prevent site contamination, Veolia – Menomonee Falls believes that any potential contamination of surface or underground water supplies is and will be prevented.

5.2.2 Equipment and Power Failure

The facility uses commercial electric power to run the lights, pumps, and various motors at the facility. A facility-wide back-up electric power generating capacity to serve in the event of a power

interruption is not necessary, therefore is not provided. However, a battery back-up system is and will be provided for the alarm system and selected lighting. Temporary commercial power interruptions will not adversely affect safety or emergency-preparedness programs.

Several portable pumps and an adequate inventory of absorbent material and overpack drums are kept at the existing facility to respond to spill emergencies. Also, the facility has immediate access to vacuum trucks and other equipment from the nearby Veolia Transportation operation. Routine preventive maintenance is provided to keep all facility equipment in good repair.

5.2.3 Personnel Protection

Facility personnel involved in the direct management of hazardous wastes are and will be required to wear adequate personal protection equipment such as: hard hats, safety glasses and/or face shields, steel-toe shoes or boots, protective coveralls and gloves, and respirators, as appropriate, while working in active areas of the facility. In addition, all Veolia – Menomonee Falls employees are and will be provided training to emphasize the importance of wearing this protective equipment and following the facility's safety rules and personal hygiene procedures (see Training Program in Section 6.0). An example of personal protection equipment for each type of operation can be found in Table 5-2.

Ventilation systems are installed in all buildings to control the accumulation of dust, fumes, and vapors that might be released during the management of waste materials. Suitable air pollution equipment is utilized.

5.3 Prevention of Reactions

Pursuant to the Waste Analysis Plan (Section 3.0), all wastes entering the site for treatment in the Drum Repack/Bulk/Decant Unit will be analyzed for their ignitability, reactivity, and compatibility with other waste material being processed in the treatment unit. Such analyses also will be performed, when necessary, as wastes pass through various storage units at the facility. These analyses enable the facility to identify and appropriately segregate all wastes so that they can be

managed in a safe manner as discussed in the following subsections.

The facility will incorporate many precautions in its design and operation to prevent ignition or reaction of ignitable or reactive wastes. In particular, these precautions will include the following design features:

- Utilization of non-sparking tools where ignitable waste are present;
- Non-acceptance of unstable or explosive wastes.

Also included are the following operational procedures:

- All maintenance or construction operations involving the use of hot surfaces or open flame will be allowed only with the specific permission of the Facility Manager, Operations Manager, Operations Supervisor and/or Environmental, Health and Safety Manager. Operations so controlled will include welding, brazing, soldering, flame cutting, and use of portable heaters or blowtorches;

- Tanker trucks carrying ignitable wastes will be properly grounded and bonded following the prescribed procedures anytime hatches are opened or liquid transfer is occurring during loading;

- Truck traffic will be given specific directions and routing by facility personnel at the entrance gate;

- Facility personnel will always be present during loading and unloading operations to perform or direct the work;

- Visitors to the facility will be accompanied by facility personnel and instructed on elementary safety precautions, especially about the prohibitions on smoking or use of open flame; and

- Smoking is only permitted in designated areas of the facility.

5.3.1 Ignitable Wastes

Containerized ignitable wastes, after being received and temporarily stored in the Container Storage Unit, may be decanted and transferred into bulk semi-tankers at the Repack/Bulking/Decant Unit. Alternatively, the containers may be transferred off site. Bulk receipts of ignitable liquids also are received at Veolia – Menomonee Falls and re-manifested off-site for reclamation or incineration. All bulk ignitable wastes will be transferred off-site in bulk tanker trucks for reclamation or incineration.

To prevent the accidental ignition of ignitable wastes, all smoking, welding, open flames or other ignition sources are and will be prohibited in all waste storage areas of the facility. To communicate this, "No Smoking" signs are conspicuously posted throughout the facility.

5.3.2 Reactive Wastes

All drums of reactive wastes received by the facility are stored in a dedicated bay of the Container Storage Unit until they are transferred off site. This segregated storage of reactive wastes prevents commingling of reactive wastes with all other potentially incompatible wastes managed at the facility. No explosive or shock-sensitive reactive wastes will be managed at Veolia – Menomonee Falls.

5.3.3 Incompatible Wastes

Potentially incompatible containerized wastes are stored in separate bays in the Container Storage Unit. Appropriate analyses consistent with the Waste Analysis Plan will be performed to properly segregate wastes during storage and handling to prevent any mixing.

In addition facility personnel are trained to ensure they select the proper container for using when transferring or re-containerizing wastes. This includes verifying that any material that was previously held in the container is compatible with the materials to be transferred into it. Also, the container itself must be compatible with the materials that are to be transferred into the container.

5.4 Documentation of Compliance

Wastes are segregated into compatible waste categories as determined by application of the Waste Analysis Plan for storage and disposal. Storage locations, documenting that wastes are properly stored, are identified in the Facility Operation Record.

Veolia utilizes as much information as is available to ensure wastes are managed to prevent any unwanted reactions or mixing of incompatible materials. Veolia has a full time corporate Chemical Information Specialist on staff whose job responsibilities include performing research on all chemicals to ensure that the Veolia Chemical Database is populated with the most current information pertaining to all chemicals. In addition, this individual takes a leadership role in the development and delivery of technical training programs relating to reactive chemical handling, cylinder management, chemical transportation, and the safe handling of hazardous waste.

Veolia has a team of employees who have received additional training in the proper handling and management of reactive chemicals. This team with the assistance of the Chemical Information Specialist performs research on the safest methods to manage materials that may be considered reactive. This includes monthly calls to share information across the company.

In addition, at the facility Veolia has a Technical Manager who also performs a review of all waste streams received at the facility and ensures that they are being managed properly and in a manner that will prevent unwanted reactions.

5.5 Inspection Program

The facility's Inspection Plan is provided in Appendix A. The plan includes the inspection schedules for all of the regulated areas of the facility. Section 2.0 of the plan discusses the administration of the inspection plan. Section 3.0 of the plan presents procedures for general facility inspection. Process specific inspection procedures pertaining to the Laboratory, 1200 Container Storage Unit, Repack/Bulking/Decant Unit, Waste Stabilization Unit, and Southeast Container Storage Unit is presented in Section 4.0 of the plan. Inspection of the tank wall thickness is discussed in Section 5.0 of the plan.

Veolia is also evaluating the use of electronic site inspections. When implemented, the inspector will record the required inspection element responses electronically on a mobile tablet or similar recording device. Once a particular inspection is completed, the corresponding electronic inspection form would be saved to an internal network server at the facility. The network server is accessible from most site work stations, is backed up nightly at an off-site location, and would allow for the electronic inspections to be maintained for a minimum of three years following the date of the inspection.

TABLE 5-1

EMERGENCY EQUIPMENT

Equipment Name and Physical Description	Location	Equipment Capabilities
Hand-held Fire Extinguishers	Major locations throughout facility and on earthmoving equipment and motorized vehicles	Type A, B, *or* C Fires
1501 Fire Extinguisher	Container Storage Area, Non-Hazardous Process Building	Type B or C Fires
First Aid Kits	Major locations throughout the facility	Personnel injuries (standard first aid items included)
Absorbent Material	Container Storage Area, Non-Hazardous Process Building, Maintenance Building, Stabilization Building	Spill Control Stabilization
Disposable and Reusable Organic Vapor and Acid Gas Respirator, w/pesticide, dust, mist filters	Personal Protective Equipment Store Room	Protective Equipment
Ammonia/Methylamine Respirator	Personal Protective Equipment Store Room	Protective Equipment
Chemical Splash Goggles/Pull Face Shields	Personal Protective Equipment Store Room	Protective Equipment
Safety Showers	Lab, Container Storage, Non-Hazardous Process Building, Stabilization and Storage Building	Protective Equipment (Emergency Eye Wash)
Rain Gear, Chemical Protective Clothing	Personal Protective Equipment Store Room	Protective Equipment
Truck for Roll-Off Container	Varies	Move soil, materials, and *any* special equipment to contain spills and clean up any decontamination.
Backhoe	Waste Stabilization Unit	Smother *fires*, form berms

Note: The location of vehicles varies with daily operational requirements. All equipment is inspected and tested as required and as described in the Inspection Plan Appendix A).

TABLE 5-2

EXAMPLE OF MINIMUM PERSONNEL PROTECTION EQUIPMENT

TYPE of Operation	Protective Equipment Required
All plant areas except office areas, lunch rooms, rest rooms, employee parking and maintenance department	Hard-bat, safety shoes, safety glasses with side shields, long sleeved shirts and trousers
Tank truck sampling	Hard-hat, safety shoes, safety glasses, rubber gloves, boots, respirator, and Tyvex coveralls
Connecting & disconnecting unloading or transferring.	Hard-hat, safety shoes, overboots, chemical splash goggles, face shields, rubber gloves, respirator, and Tyvex
Drum Sampling	Hard-hat, safety shoes, safety glasses, face shield and goggles, rubber gloves, respirator, coveralls, and Tyvex
Drum Handling (unopened and intact)	Hard-hat, safety shoes, safety glasses, protective gloves
Drum handling - opening and emptying	Hard-bat, safety shoes, safety goggles, chemical resistant suits, face shield, rubber gloves, rubber boots and respirator
Waste Stabilization Operations (heavy equipment operators, spotters)	Hard-hat, safety shoes, safety glasses, chemical resistant suits, protective gloves, rubber boots and respirator
Roll-Off Container Storage Operations	Hard-hat, safety shoes, safety glasses, protective gloves

Note: The required personal protective equipment (PPE) will be determined based upon actual work conditions existing at the TASK location. Actual PPE requirements may therefore vary from that cited in Table 5-2.

SECTION VI

TRAINING

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

6.0 TRAINING PLAN

6.1 Introduction

In accordance with the regulatory requirements of 40 CFR 264.16 and Wis. Adm. Code NR 664.0016, and 29 CFR 1910.120. Veolia ES Technical Solutions, L.L.C. has developed this training plan as an integral part of the Feasibility Report for its facility located in Menomonee Falls, Wisconsin. A copy of this plan is available at the facility at all times.

Training is essential to the efficient and safe operation of all facility processes, and to rapid and effective responses to emergency conditions. It is Veolia policy that all employees be trained to perform in a manner which emphasizes accident prevention to safeguard human health and the environment.

6.1.1 General Training Concept

Each new employee is trained in the general orientation and operation of the facility. A training program related to the specific duties of each job function is specifically tailored for the position. No employee is permitted to work under reduced supervision until the Facility Manager, or alternate, has determined that the employee has successfully completed all elements of the tailored training program. The introductory training will be completed within six months of the new employee's entry into a specific job. In addition, every employee will participate in continuing training to maintain proficiency, to learn new techniques and procedures, and to reinforce safety and compliance consciousness.

6.1.2 Program Implementation

Implementation of the training program encompasses:

- Identification of training requirements (for each job);
- Selection of qualified instructors;
- Delivery of training program;
- Employee testing and performance evaluation; and
- Documentation of each training session.

Responsibility for the training program rests with the Facility Manager. The Facility Manager selects qualified instructors, participates in development of the training program content and format, provides the necessary resources, and ensures that employee training records are maintained. The Facility Manager may appoint a Training Coordinator to plan, organize, and control the training programs.

6.2 Position (Job) Descriptions

Training is tailored to prepare the employee to safely and effectively perform the functions of his/her position and to ensure that the employee will be able to respond effectively to emergency situations at the facility. Job descriptions are the key to designing specific training programs because they identify the responsibilities and duties of each position.

6.2.1 Facility Organization

The primary functions of this facility are transportation, storage, and treatment of hazardous wastes, involving properly trained operations personnel. In addition, this broad-based business facility includes general management functions performed by technical support personnel (e.g., laboratory chemists, engineers), and administrative staff (e.g., financial, marketing/sales, and clerical).

6.2.2 Staff Positions

Personnel with the following position titles are either currently employed and are actively involved at this facility or may be employed at the facility as business conditions dictate. Additional position titles may also be added as business conditions dictate:

Account Manager
Accounting Coordinator
Administrative Assistant
Approvals Manager
Branch General Manager
Chemist
Controller
Environmental/Health and Safety Manager
Environmental Specialist - Depack
Inventory Control Manager
Laboratory Supervisor
Operations Manager
Operations Supervisor
Project Manager
Regional Human Resources Manager
Shift Supervisor
Technical Service Representative
Union On-site Driver
Union Operator
Union Utility Labor

Position descriptions, which include essential duties and responsibilities as well as required knowledge, skill and ability are maintained at the facility's main office for each position related to hazardous waste management. A current list of job titles and the employee filling each position is also maintained. Facility organization and position descriptions will change periodically, as operations expand or are modified. In the interim, however, a current organizational chart is maintained at the facility's main office. An example of job descriptions for this facility can be found in Attachments 6-1 and 6-2.

6.3 Training Program

All personnel employed at this facility undergo continuing training pursuant to this plan. All new employees are introduced to the full-training and qualification process. New employees will be considered trainees until they have successfully completed an initial training period, which will not be longer than six months in duration.

6.3.1 Scope of Training for New Personnel

Each new employee undergoes introductory training composed of general training, job-specific training to varying degrees, and emergency response training (special skills). The amount of training an employee receives depends upon his/her job duties, other responsibilities such as casualty control, and the employee's knowledge level based on prior experience. This section describes the scope of introductory training, while Section 6.3.2 explains the method for determining the amount of training a new employee will receive.

6.3.1.1 General Training

All trainees complete a series of general training courses to familiarize them with the facility, the Contingency Plan, and basic emergency response skills. These courses ensure that trainees have the basic skills to protect themselves and their fellow employees soon after becoming a Veolia employee.

6.3.1.1.1 New Employee Orientation and Basic Safety Training

All trainees undergo an orientation and basic safety training session of approximately four hours duration to introduce them to the company (Veolia), to the management and operations of the Menomonee Falls facility; to the Contingency Plan, and to basic health and safety skills.

This orientation and basic safety training program includes procedures for entering and leaving the facility, facility layout, restricted areas, the nature and characteristics of hazardous wastes, an overview of federal, state, and local regulations, an overview of the facility's receiving, storage and treatment processes, basic personal protection techniques, and the safety rules of the facility, general facility rules, administrative procedures and organizational structure, an outline of the training requirements, and the duties of each employee's job. During orientation, the employee is also thoroughly familiarized with the facility's communications systems, evacuation procedures, and the locations of emergency equipment described in the facility's Contingency Plan.

6.3.1.1.2 General Contingency Plan Training

As discussed in Section 6.3.1.1.1 of this plan, each trainee is familiarized with the facility's Contingency Plan during his/her orientation and basic safety training session. Training in emergency procedures is provided by the facility's Emergency Coordinator, the alternate coordinator, or other qualified trainers. At a minimum, it includes:

- Description of possible emergency situations;
- Duties of the Emergency Coordinator and others;
- Emergency communication and alarm systems;
- Evacuation procedures and routes;
- Location of emergency equipment such as alarms, first aid stations, eye wash stations, safety showers, firefighting equipment, etc.; and
- Incident/accident reporting mechanism(s).

This instruction consists of classroom instruction, followed by a facility walk-through to: (1) point out areas of potential risk; (2) identify what to look for; (3) show where alarms and emergency equipment are located; and (4) demonstrate the alternative routes to be used in the event that an evacuation is ordered. The Emergency Coordinator or other qualified trainer must ensure that each trainee has demonstrated his or her knowledge of the communication system, evacuation procedures, and location of emergency equipment.

6.3.1.1.3 Basic Emergency Response and Preparedness Training

All operations personnel are trained in basic firefighting (e.g., use of fire extinguishers). This training is conducted, when possible, with the assistance of local fire department representatives. The training includes special hazards, particularly the hazards created when chemicals stored at the facility come into contact with heat or water.

As part of their training, employees also participate in at least one emergency simulation/evacuation drill annually to practice evacuation of the facility. This gives management and the employees an opportunity to check the employees' recall of the alarm system and the evacuation routes.

6.3.1.2 Job-Specific Training

After completing the general training, new employees are given instructions to address the specific needs of their job functions and to ensure that their work is performed safely and in accordance with applicable regulations. A list of required training courses is prepared for each job position by the supervisor responsible for managing the position. The supervisor prepares a Job Position Training Requirements List using the job description, a master list of course possibilities, and advice from the site Training Coordinator. The training matrix identifies the required training courses for each job title/position. The supervisor periodically reviews the required training courses for each job title/position and updates as necessary.

The training matrix courses address these major training topics:

- Chemical hazards communication awareness, which expands upon the hazard recognition skills learned during orientation and basic safety training. Based upon job duties, employees learn to identify chemical hazards in their work area, common warning systems used at the facility, sources of data on the chemicals, and handling precautions for the chemicals with which the employees will be working.

- Personal protection, which takes employees through the care, use, limitations, and decontamination of the respirators and protective clothing that are required for their job duties. This training supplements what the employees learned during general training about basic personal protection techniques and clothing. The employees may also learn how to use eye wash/chemical safety showers and hearing protection, if required for their jobs.

- Regulatory compliance training, appropriate for their job duties, such as manifest preparation, labeling, placarding, and waste acceptance procedures. This training also expands upon the skills learned during orientation.

- Job-specific operations and maintenance training, which provides instruction in those skills that an employee must master to perform his or her job duties. This training may include coverage of these elements as appropriate for the job duties and to reduce the risk of emergencies:

    - Work area/process description and its relationship to other facility units

- Process and equipment inspection, routine maintenance, and operation and shutdown during normal and emergency situations which also includes, where applicable, operation of built-in controls and/or containment mechanisms such as key parameters for automatic waste feed cut-off systems;

- Over-the-road and off-highway mobile equipment inspection, routine maintenance, operations, and safety procedures.;

- Maintenance, including inspection schedules, repair and replacement procedures, minor spill cleanup, and decontamination for processes, equipment, vehicles, and the facility's emergency and monitoring equipment;

- Materials handling, loading and unloading, drum handling, and storage; and

- Record keeping requirements.

The training matrix and current master job title listing are maintained at the facility and are included as Attachments 6-3 and 6-4.

The Facility Manager (or an alternate, such as the Environmental Manager) reviews and approves the required training courses for each job title/position.

6.3.1.3 Special Skills Training

As required, each employee is provided with comprehensive "special skills" training. Depending upon their duties, the employees are familiarized with facility emergency procedures, emergency equipment, and emergency response systems. This specialized emergency response training

includes the following elements, as applicable:

- Procedures for inspection, using, and performing routine maintenance on the facility's emergency equipment;

- Procedures for using the emergency communication and alarm systems;

- Response duties in the event of fires, injuries or other incidents;

- Response procedures for incidents that release hazardous wastes, including spill containment/cleanup procedures to prevent groundwater contamination;

- First Aid and CPR; and

- Casualty control

For example, at least two employees per shift are trained in First-Aid and Cardio-Pulmonary Resuscitation(CPR). This training may be conducted by the American Red Cross, the American Heart Association, YMCA, local fire department, and/or qualified First Aid instructors.

Employees assigned to the Casualty Control Team are trained further in the use of casualty control procedures. This training may be taught by the facility's Safety Staff, Emergency Coordinator, local fire department, the American Red Cross, or other qualified trainers. Techniques include the following based upon responsibilities: (1) search and rescue procedures; (2) injury evaluation; (3) decontamination of victims; (4) coordination with ambulance personnel; (5) safe transport of injured personnel; (6) evacuation procedures; and (7) communications with emergency response organizations, such as emergency medical treatment centers and the National Poison Control Center.

Where appropriate, the employee's emergency response training also includes the application of chemical properties to the understanding and evaluation of potential hazards. These may include vapor density, significance of upper and lower explosive limits, chemical reactivity, and the selection of proper fire extinguishers and protective clothing.

6.3.2 Training Program Administration

The selection of qualified instructors, the use of effective training formats, and evaluation of an employee's learning are critical. These considerations are addressed at the Veolia-Menomonee Falls facility as described below.

6.3.2.1 Training Personnel Qualifications

Veolia regional management or the Veolia Corporate Training Officer counsel and provide concurrence on the selection and/or approval of individuals designated by the Facility Manager to conduct specific portions of the training program. The trainers (instructors) are recognized consultants and in-house specialists in the specific fields being taught and have broad experience in hazardous waste management. This actual hands-on experience is important so that the instructor can relate the specific subject area to actual facility operations and can answer employee questions. Specific training may be conducted by an immediate supervisor, department manager, facility safety staff, Health and Safety Manager and Environmental Manager, or the Facility Manager. Supervisory personnel are encouraged to sharpen their instructional skills by periodically attending classes, seminars, meetings, and workshops at outside institutions or other Veolia facilities. In addition, trainers are assisted by Veolia's regional management and corporate staff in developing effective training programs and teaching aids.

6.3.2.2 Training Formats

Training is conducted in classroom meetings, in small discussion groups, in field exercises, emergency drills, and at an employee's work station (i.e., on-the-job). These activities may be supplemented by reading assignments, problem sets and other teaching aids.

For some classroom training (such as for equipment operators), courses and teaching materials developed by the manufacturer are used, either by arranging for the course to be presented on-site, or by sending employees to the manufacturer's factory training sessions. Field demonstrations and practice sessions reinforce skills and promote safety awareness.

The employee's supervisor is responsible for on-the-job training to ensure that the employee learns correct procedures; can perform them accurately, reliably, and efficiently; and is safety conscious. Corrective action is taken as soon as a deficiency is observed so that the trainee does not develop poor working habits. The employee is assigned increasingly complex or responsible duties based on demonstrated performance.

6.3.2.3 Training Effectiveness Evaluation

Training effectiveness is measured by written or oral examinations, or by job performance evaluations. The Training Coordinator must enter into the training record that an employee has completed the necessary training successfully.

6.3.2.4 Qualification of Trainees for Work Under Reduced Supervision

No employee may perform work under reduced supervision at the facility until he or she has been qualified as fully trained by the Facility Manager (or a designee, such as the Training Coordinator). Qualification is earned through successful completion of the general training, job-specific training, and special skills training as required by position requirements and the employee's past education, experience, and skills.

The Facility Manager and designees (e.g., the Environmental Manager, Training Coordinator, and the trainee's Supervisor) determine the amount of job-specific and special skills training a new employee needs above and beyond the general training requirements. This determination is based on comparisons of the employee's past employment records with the job position description and its training requirements list. This comparison results in a schedule of the necessary job-specific and special skills courses for the employee. As an employee completes this training, the Training Coordinator updates the employee's Training History Record. This record is reviewed periodically to evaluate the employee's training completion status, until all of the required training courses have been completed. Upon completion, the employee is qualified to work under reduced supervision.
Some of the training requirements may be waived by the Facility Manager if the employee can demonstrate prior competence. Proof of competence may include transcripts from academic institutions, certificates of professional or technical course completion, demonstrated job experience elsewhere, or the passage of a performance evaluation such as a written examination.

6.3.2.5 Trainee Feedback

Trainee comments and feedback of the training programs are encouraged throughout the entire training process. These comments are used by the trainers to modify and improve the training program scope, content, and/or format, as appropriate.

6.3.3 Continuing Training

An employee's training does not end with his or her initial qualification. In fact, it never ends as long as the employee continues to work at the facility. Periodic "refresher" training is required and provided, as discussed herein.

6.3.3.1 Frequency of Training

Continuing training is designed to maintain proficiency in job skills, increase safety and quality consciousness, and teach new skills. Such training consists of regularly scheduled:

- Safety meetings;
- Annual basic fire fighting practices;
- Annual emergency response exercises;
- Annual respirator and protective equipment reviews;
- Annual Contingency Plan refresher training;
- CPR recertification as required by the American Red Cross or other agency;
- Requalification of First Aid training as required by the American Red Cross; and
- As needed training to teach new skills, new operating procedures, or greater depth in specific areas.

6.3.3.2 Continuing Training Content

Safety meetings are regularly scheduled for the employees. These sessions are led by the Facility Manager, Health, Safety and Environmental Manager, or alternate, and are assisted by operations

managers or supervisors. These meetings are used to educate, communicate with, and motivate employees. The subjects covered may range from review of safety procedures, to presentations on regulatory or policy changes, to discussion of accident prevention goals. The meetings may or may not include performance evaluation.

The annual fire extinguisher practice is organized by the Health, Safety and Environmental Manager, or alternate, in conjunction with the local fire department. Fire fighting practice is scheduled for each operating shift at least once each year. Additional training aids on the selection and use of portable fire extinguishers may be used to reinforce learned skills.

The annual emergency response review is planned by the Health, Safety and Environmental Manager, or alternate. An emergency incident (e.g., spill, fire, explosion, sudden waste release, facility evacuation) is simulated, and employees respond according to their assigned emergency response duties.

Annual refresher training related to the Contingency Plan is required of all employees. This training reviews the site operations and Contingency Plan to update previous training.

As needed, training is provided to cover any changes in facility procedures or operations and to teach new skills -- either before, or as such changes occur. Such training enhances the broad waste management skills of management and supervisory personnel. Some of this training may be accomplished by attending adult education classes, college courses, and seminars at off-site institutions.

6.3.4 Documentation of Training

Training records are maintained at the facility. They include a written description of the content of each training session, identify attendees and trainer(s), recount dates of training sessions, and record the signatures of trainers and attendees, thus certifying that the training was accomplished.

Each employee has a Training History Record file on-site that contains his or her job description, training matrix which identifies the training requirements for that description, and appropriate documentation that the requisite training has been completed satisfactorily. Training documentation for current employees will be maintained at the facility until closure. For at least three years after facility closure, personnel training records will be retained at the corporate offices.

An employee's training history file will be sent to the Facility Manager of any other facility owned/operated by Veolia to which the employee may be transferred. Training files of employees who leave the employment of Veolia will be retained for three years at the last facility where they worked.

VEOLIA ENVIRONMENTAL SERVICES

Job Description

Job Title:	Environmental Specialist Depack I	**FLSA Status:**	Nonexempt
Branch:	Central	**EEO Code:**	300
City & State:	Menomonee Falls WI		

Job Summary:

This position provides specialized hazard determination and consiolidation of chemical waste materials. Responsibilities include testing, consolidation, packaging, spill response, labeling, loading/unloading, coordinating transportation, and sampling/profiling material while adhering to state and federal environmental, health, and safety regulations.

Education/Experience:

- High School diploma or General Educational Development (GED) required
- Bachelor's degree in Chemistry or related science discipline preferred

Certification/Licenses:

- 40-hour HAZWOPER Certification
- Valid Drivers License

Knowledge, Skills and Ability:

- Strong team player
- Excellent interpersonal and communication skills
- Time management: the ability to organize and manage multiple deadlines
- Computer proficiency
- Ability to operate forklift
- Ability to follow through on assignments

Essential Duties and Responsibilities:

- Sample waste streams according to prescribed policies and procedures.
- Manually open, unpack, and consolidate containers of hazardous materials.
- Test, consolidate, and provide spill clean-up response and remedial activities, labeling, loading, off loading, and logistics coordination for hazardous materials in a facility setting.
- Assist in the loading/unloading of hazardous waste materials at fixed facility sites utilizing appropriate equipment such as drum dollies, forklift, etc. to ensure transfer of waste in a safe and timely manner.
- Comply and enforce all compliance, health, safety, and procedures in accordance with VES-TS policies.
- Become familiar with all U. S. Department of Transportation (DOT)/Environmental Protection Agency (EPA) and VES-TS regulations.

Non-Essential Duties and Responsibilities:

- Operate and maintain all equipment in a professional manner to ensure optimum efficiency and effectiveness.
- Other duties as assigned.

Job Title: Environmental Specialist Depack I

Physical Requirements/Work Environment:

The physical demands and work environment described here are representative of those that an employee encounters while successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

(Frequency Values: N/A = Not Applicable, Occasionally = 1-35%, Frequently = 36-66%, Continuously = 67-100%)

General				
Sitting:		4 hrs/day		
Standing:	Continuously	4 hrs/day		
Walking:	Continuously	4 hrs/day		
Fine Finger Movements:	Frequently		Twisting:	Frequently
Eye-Hand Coordination:	Continuously		Climb/Work Aloft:	Occasionally
Bending:	Continuously		Reach above Shoulder Level:	Occasionally
Noise Level:	Minimal			
Handing of Hazardous Material:	Yes	Drum Handling, Lab Pack Activities, Household Hazardous Waste, Material Handling, Site Remediation Activities, Waste Processing and Consolidations, Waste Sampling and Handling		

Other exposures not listed in Exposure Assessment Summary:

Other: N/A

Lifting			
Up to 10 lbs.	Continuously	51 to 100 lbs.	Occasionally
11 to 20 lbs.	Continuously	Over 100 lbs.	N/A
21 to 50 lbs.	Frequently		

Weather Conditions			
Indoors	Continuously	Snow/Ice:	Occasionally
Outdoors:	Frequently	Wind:	Occasionally
Sun:	Frequently	Temperature Range:	-20F to 110F
Rain:	Occasionally		

Personal Protective Equipment Required			
Safety Glasses:	Continuously	Gloves:	Continuously
Hard Hat:	Continuously	Clothing/Coveralls (Tyvek, Polycoated Tyvek, etc.):	Continuously
Hearing Protection:	Frequently	Respirator (Full Face):	Frequently
Steel-toed boots:	Continuously	Powered Air Purifying Respirator (PAPR):	Occasionally
Apron:	Frequently	Self-Contained Breathing Apparatus (SCBA):	Occasionally

VEOLIA ENVIRONMENTAL SERVICES

Job Description

Job Title:	Chemist II	**FLSA Status:**	Exempt
Branch:	Central	**EEO Code:**	200
City & State:	Menomonee Falls, WI		

Job Summary:

Responsible for performing a variety of routine analysis and screening on organic and inorganic substances to determine make up of hazardous waste and appropriate stabilization by applying the most effective methods according to quality assurance and control procedures. Maintains the laboratory and equipment in compliance with regulatory and site specifications.

Education/Experience:

- Bachelor of Science in Chemistry or related discipline required
- 4 or more years experience in the hazardous waste industry or related work experience preferred.

Certification/Licenses:

- None

Knowledge, Skills and Ability:

- Strong team player
- Strong customer orientation

Essential Duties and Responsibilities:

- Performs a variety of fingerprint screens, cyanide analysis and other wet chemistry methodologies to determine nature of hazardous substance.
- As required samples incoming bulk loads to establish nature of contents and determines packaging and appropriate disposal of samples according to proscribed procedures.
- Assist facility personnel with acceptance paperwork to ascertain correctness and enhance efficiency and effectiveness in the disposal of hazardous waste materials.
- Perform other laboratory analysis as requested by immediate supervisor.
- Comply with federal, state, and local regulatory agencies in the disposal of hazardous waste materials.

Non-Essential Duties and Responsibilities:

- Certificate of Disposal (COD) Tracking
- Other duties as assigned.

Job Title: Chemist II

Physical Requirements/Work Environment:

The physical demands and work environment described here are representative of those that an employee encounters while successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

(Frequency Values: N/A = Not Applicable, Occasionally = 1-35%, Frequently = 36-66%, Continuously = 67-100%)

General				
Sitting:	Frequently	4 hrs/day		
Standing:	Continuously	6 hrs/day		
Walking:	Continuously	6 hrs/day		
Fine Finger Movements:	Continuously		Twisting:	Frequently
Eye-Hand Coordination:	Continuously		Climb/Work Aloft:	Occasionally
Bending:	Occasionally		Reach above Shoulder Level:	Occasionally
Noise Level:	Minimal			
Handing of Hazardous Material:	Yes	Laboratory Activities, Waste Sampling and Handling, Household Hazardous Waste		

Other exposures not listed in Exposure Assessment Summary:

Other: N/A
Other: N/A
Other: N/A

Lifting			
Up to 10 lbs.	Continuously	51 to 100 lbs.	Occasionally
11 to 20 lbs.	Frequently	Over 100 lbs.	N/A
21 to 50 lbs.	Occasionally		

Weather Conditions			
Indoors	Continuously	Snow/Ice:	Occasionally
Outdoors:	Occasionally	Wind:	Occasionally
Sun:	Occasionally	Temperature Range:	-20F to 110F
Rain:	Occasionally		

Personal Protective Equipment Required			
Safety Glasses:	Continuously	Gloves:	Continuously
Hard Hat:	Occasionally	Clothing/Coveralls (Tyvek, Polycoated Tyvek, etc.):	Continuously
Hearing Protection:	Occasionally	Respirator (Full Face):	Frequently
Steel-toed boots:	Occasionally	Powered Air Purifying Respirator (PAPR):	Occasionally
Apron:	Continuously	Self-Contained Breathing Apparatus (SCBA):	Occasionally

TRAINING MATRIX

Course		Frequency	Job Class I	II	III
General Orientation		Upon Hire	R	R	R
SQC - Individuals Role		Upon Hire	R	R	R
Haz Waste Oper & ER	*(40 HRS/Orientation)*	Upon Hire	R	JS	R
Fundementals of OPS	*(RCRA & DOT/Orientation)*	Upon Hire	R	JS	R
Haz Com & Awareness	*(orientation and annual refresher)*	Upon Hire/Annual	R	R	R
8 HR OSHA Refresher		Annual	R	JS	R
Toxicology	*(part of annual refresher)*	Annual	R	JS	R
Air Purifying Respirator Fit Test	*(part of annual refresher)*	Annual	R	JS*	JS*
Supplied Air Breathing Apparutus	*(part of annual refresher)*	Annual	R	JS	R
PPE (Clothing & Respirator)	*(part of annual refresher)*	Annual	R	JS	R
Air Cont. Monitoring	*(part of annual refresher)*	Annual	R	JS	R
Radiation/Biohazard Awareness	*(part of annual refresher)*	Annual	R	JS	R
CPR	*(part of annual refresher)*	Annual	JS	JS	R
First Aid		Triennial	JS	JS	R
Fire Safety/Extinguisher Use	*(part of annual refresher)*	Annual	R	JS	R
Hand. Flam. Liquids-Grounding/Bonding	*(part of annual refresher)*	Annual	R	JS	R
Confined Space Awareness	*(part of annual refresher)*	Annual	R	JS	R
Confined Space Entry/Non-Entry Rescue		Annual	NA	NA	JS
Cylinder/Pressure Vessel Safety	*(part of annual refresher)*	Annual	R	JS	R
Spill Response/Work Zones	*(part of annual refresher)*	Annual	R	JS	R
Back Lifting Procedures		As Needed	JS	JS	JS
Excavations		As Needed	JS	JS	JS
Contingency Plan (Facility)	*(part of annual refresher)*	Annual	R	R	R
Contingency Plan Drill (Facility)		Annual	NA	JS	R
LDR		As Needed	JS	JS	JS
Hazardous Waste Manifest		As Needed	JS	JS	JS
10-Day Transfer Facility Training		Annual	O	JS	JS
HM126F - Module I General Awareness		Triennial	R	R	R
HM126F - Module II Hazardous Mat/Class.		Triennial	JS	JS	JS
HM126F - Module III Shipping Papers & ER		Triennial	JS	JS	JS

Class I: Non-Supervisory Field Personnel
Class II: Supervisory Field Personnel
Class III: Sales
Class IV: Office Admin Personnel
Class V: Occasional Field Personnel
Class VI:Facility

R - Required
JS - Job Specific
NA - Not Applicable
* - Respir. user

ATTACHMENT 6-3

Course	Frequency	I	II	III
HM126F - Module IV Marking & Labeling	Triennial	JS	JS	JS
HM126F - Module V Placarding Requirements	Triennial	JS	JS	JS
HM126F - Module VI Loading & Unloading	Triennial	JS	JS	JS
HM126F - Module VII Awareness, Assessment and Prevention	Triennial	JS	JS	JS
HM126F - Module VIII DOT Emergency Response	Triennial	JS	JS	JS
Chemical Segregation	As Needed	JS	JS	JS
DOT RQ Determination	As Needed	JS	JS	JS
Sexual Harassment *(part of annual refresher)*	Annual	R	R	R
Substance Abuse Policy *(part of annual refresher)*	Annual	R	R	R
Ethics Policy *(part of annual refresher)*	Annual	R	R	R
Forklift Operations	Triennial	NA	NA	JS
Bobcat Operations	Triennial	NA	NA	JS
Environmental Specialist II Test	One Time	NA	NA	NA
Environmental Specialist III Test	One Time	NA	NA	NA
OJT Environmental Specialist I	One Time	NA	NA	NA
OJT Environmental Specialist II	One Time	NA	NA	NA
Emergency Response and Site Remediation / SSO *(4days)*	One Time	NA	NA	NA
Reactives Training	One Time	NA	NA	NA
DEA Training	One Time	JS	NA	JS
WIP Training	As Needed	JS	JS	JS

Class I: Non-Supervisory Field Personnel
Class II: Supervisory Field Personnel
Class III: Sales
Class IV: Office Admin Personnel
Class V: Occasional Field Personnel
Class VI:Facility

R - Required
JS - Job Specific
NA - Not Applicable
* - Respir. user

MASTER JOB TITLE LISTING

Job Title	Job Class
Account Manager	I
Accounting Coordinator I	II
Accounting Coordinator II	II
Accounting Coordinator III	II
Administrative Assistant	II
Approvals Manger	III
Branch General Manager	III
Chemist II	III
Controller	II
Environmental Health & Safety Manager	III
Environmental Specialist - Depack I	III
Environmental Specialist - Depack II	III
Environmental Specialist - Depack III	III
Inventory Control Manager	III
Laboratory Supervisor	III
Operations Manager I	III
Operations Manager II	III
Operations Supervisor I	III
Project Manager	III
Regional Human Resources Manager	II
Shift Supervisor	III
Technical Service Representative I	III
Technical Service Representative II	III
Union On-site Driver	III
Union Operator	III
Union Utility Labor	III

SECTION VII

CONTINGENCY PLAN

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

7.0 CONTINGENCY PLAN

7.1 INTRODUCTION

The Contingency Plan, including the associated response procedures, that will be activated in the event of a significant unplanned release of hazardous waste or other major emergency at the Veolia ES Technical Solutions, L.L.C. – Menomonee Falls (Veolia) facility are contained in this section. Pursuant to requirements, the facility will maintain this Contingency Plan which details procedures to "minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous wastes or hazardous waste constituents to air, soil, or surface water" [CFR 270.14(a) (7) and 264.50 and s. NR 664.50]. An up-to-date copy of this Contingency Plan will be kept at the facility.

This plan provides an explicit description of the response procedure to be implemented in an emergency situation, which will protect the public, personnel at the facility, and the environment. Various structural and operational measures will be in place, designed to minimize the possibility of such an emergency situation occurring. The following sections present the procedures and details for implementation of the plan.

7.2 GENERAL FACILITY DESCRIPTION

The Veolia – Menomonee Falls facility serves as a transportation, treatment and storage facility for hazardous and non-hazardous waste. Thus, the facility temporarily stores hazardous and non-hazardous waste, processes non-hazardous waste and treats hazardous waste. No hazardous waste is disposed of at the facility. The facility also operates a permanent Household Hazardous Waste collection.

7.2.1 Facility Identification, Location and Site Plan

Name: Veolia ES Technical Solutions, L.L.C. – Menomonee Falls

Location: The facility is located within the Village of Menomonee Falls, Wisconsin, near the intersection of Boundary Road (124th Street) and County Line Road.

Facility Operator and Mailing Address:

Veolia ES Technical Solutions, L.L.C.
700 East Butterfield Road
Lombard, IL 60148

Figure 7-1 shows the location of the facility. Figure 7-2 shows the layout of the facility.

7.2.2 Facility Operations

Veolia - MF currently serves as a treatment and storage facility for containerized and bulk hazardous and non-hazardous wastes. These wastes are sampled and analyzed (according to the Waste Analysis Plan), received, and stored compatibly in storage bays in the Container Storage Unit until the waste is either treated on-site or shipped off-site for treatment and/or disposal. Bulk quantities of non-reactive solid hazardous wastes are stored in Roll-Off/Lugger Box type containers in the Roll-Off Box/Lugger-Box Storage Unit.

Waste treatment services are also provided through a chemical/physical process that stabilizes wastes by immobilizing the hazardous constituents. The Waste Stabilization Unit mixes an agent, generally cement, pozzolon phosphates, or similar bonding materials added to the waste stream to cause a physical/chemical change of the waste. Oxidizing and/or reducing agents may also be utilized as required for treatment of certain waste material. The waste is then sampled and analyzed (according to the Waste Analysis Plan) to determine if the waste can be shipped off-site for further treatment and/or disposal.

The facility also serves as a 10-day transfer station for hazardous wastes. Small lots (less than 80 container lots) of containers (mostly drums) of hazardous wastes are temporarily held at the facility until larger lots of these containers can be accumulated for transfer to a Veolia facility or other approved disposal facilities. Certain Roll-Off/Lugger Boxes of waste are also managed as 10-day transfer material. Containers in 10-day transfer are not opened at the facility and thus the wastes are not sampled, processed, or treated at the facility. These containers may be temporarily placed in transfer bays in the Container Storage Building.

Containers of non-RCRA wastes are received for processing at the facility. Semi-liquid non-hazardous wastes are solidified and placed into Roll-Off/Lugger Box(s) or the waste transfer pit. Material from the waste transfer pit is then loaded into dump trucks/containers and hauled off site. Empty containers are crushed and placed into other Roll-Off/Lugger Boxes. The Roll-Off/Lugger Boxes are transported to nearby facilities for the disposal of the wastes and crushed drums. Storage and processing of containers of non-hazardous wastes are carried out in the Non-Hazardous Processing Building.

Management of organic wastes is also included in authorized on-site activities. Containers of hazardous organic wastes are received, stored, and treated by decanting at the facility. Bulk liquid (or pumpable) hazardous organic wastes are also received and stored at the facility. The handling of the other types of waste (non-reactive inorganic and reactive wastes) includes receipt, storage and transshipment. Bulk quantities of wastes are stored in the Roll-Off/Lugger Box Storage Unit(s). Drums will be received, sampled and stored in the Container Storage Unit. In the case of organic wastes, the liquid in these containers will be removed (by pumping) into a tanker truck for shipment offsite. The empty containers will be accumulated for reclamation or crushed for disposal. Bulk wastes, either from decanting containers or aggregation of smaller bulk shipments, are transferred off-site for further treatment and/or disposal. Solid non-reactive inorganic hazardous wastes and wastes suitable for treatment by stabilization will be received in Roll-Off/Lugger Box type containers. These containers will also be stored in the Roll-Off / Lugger Box Storage Unit. This waste is either treated on-site or transferred off-site for treatment and/or disposal.

Waste transfer operations are also conducted at the facility to handle Drums, Roll-Off/Lugger Boxes of hazardous non-reactive inorganic and reactive wastes that will be reclaimed or treated at other Veolia or alternate facilities. Also, non-hazardous wastes are handled and processed at the facility, as described above.

The facility does not operate surface impoundments, injection wells, waste piles, land treatment units or land disposal units.

7.2.3 Hazardous Wastes to be Received at Facility

Three classes of wastes are managed at the facility: recoverable and non-recoverable organic based wastes, inorganic wastes and reactive wastes. An example of wastes and their characteristics are listed in Table 7-1. Several types of wastes are not accepted or managed at the facility. These are: radioactive, explosive, and certain compressed gas wastes.

Examples of the wastes listed in Table 7-1 are managed in the Container Storage Unit. Organic wastes are treated in the Repack/Bulking/Decanting Unit. Inorganic solid waste for stabilization will be bulked from drums or Roll-Off/Lugger Boxes in the Repack/Bulking/Decanting Unit or Stabilization Unit. Solid hazardous wastes in Roll-Off/Lugger Box containers are managed in the Roll-Off/Lugger Box Storage Units of the facility.

7.2.4 Types of Potential Emergencies

The types of events that could potentially trigger implementation of the Contingency Plan are discussed in the following sub-sections.

7.2.4.1 Emergencies Inherent to Facility Operations

Potential emergencies that could result from facility operations and the types of materials processed for disposal include:

- Fire
  - Could cause the release of toxic fumes.
  - Could spread and possibly ignite materials at other locations on-site, or cause heat-induced explosions.
  - Could produce contaminated run-off from fighting fire with water or chemical fire suppressants.

- Explosion
  - Could cause a safety hazard from flying fragments or shock waves.

- Could ignite other hazardous waste at the facility.
- Could result in release of toxic material.

- Spills or Material Releases
  - Could result in release of flammable liquids or vapors capable of causing fire or gas explosion hazards.
  - Could cause the release of toxic liquids or fumes.
  - Could result in contamination of surface or ground water.

- Accident (Vehicle or Equipment)
  - Could cause a fire, explosion or spill, as described above.
  - Could result in mixing of incompatible chemicals.
  - Could cause surface contamination through release of toxic liquids.
  - Could cause air contamination through release of fumes, vapors or gases.
  - Could result in personal injury.

7.2.4.2 Natural Events

There are potential facility emergencies which could result from "Acts of God," including major climatological, geophysical or other natural events, such as:

- heavy rainstorms
- tornadoes
- heavy winds

7.3 IMPLEMENTATION OF RESPONSE PROCEDURES

In the event of an emergency that results in fire, explosion or accidental materials release, response activities will be initiated accordingly following observation of the event. An assessment of the situation will be performed immediately by the Emergency Coordinator. Response activities will be directed as appropriate, and the Emergency Coordinator will make the decision whether or not to implement the Contingency Plan.

7.3.1 Incident Assessment and Decision Process

A logic diagram of initial response activities leading to implementation of the Contingency Plan is shown in Figure 7-3. Should the release be of a minor or controllable nature, which presents no potential hazard to human health or the environment, the Emergency Coordinator will implement the post-emergency procedures described in Section 7.8 and complete the necessary reporting described in Section 7.10.

In case of an imminent or actual emergency situation, the person observing the incident will implement the following procedures:

- Activate the incident warning system (an audible alarm) to notify facility personnel.
- Phone the facility Emergency Coordinator or alternate (Table 7-2) and report his/her name, location, and nature and extent of the incident.

The Emergency Coordinator (or alternate) will take control of the affected area and allocate any resources necessary until the emergency has been eliminated and necessary cleanup and restoration is completed. The Emergency Coordinator (EC) will direct the following activities:

- Where applicable, verify that processes and/or operations are stopped, and that any released waste is contained and collected in order to ensure that fires or explosions do not occur or spread.
- Determine the source and extent of the released materials and assess the direct and secondary hazards. Evaluation criteria used by the EC to determine if the Contingency Plan is to be implemented are presented in Table 7-3.
- Insure that any materials released from the incident area are isolated from incompatible materials and that these materials are removed from the area.
- If direct or secondary hazards are possible, the Contingency Plan is implemented pursuant to procedures in Section 7.3.2.

7.3.2 Implementation of Contingency Plan

When the decision has been made to implement the Contingency Plan, the Emergency Coordinator will direct.

7.3.2.1 Internal Notification and Responsibilities

Any employee discovering a fire or hazardous materials release must immediately notify the facility Emergency Coordinator (or alternate) and personal in the immediate area who may be in danger. The names, addresses and phone numbers of the Emergency Coordinator and alternates are provided in Table 7-2. Table 7-2 also lists the names of persons whom the Emergency Coordinator must notify.

7.3.2.2 Additional Contacts to be Made

Additional contacts that may be required during an emergency are listed below.

EMERGENCY CONTACTS

GENERAL EMERGENCY	CONTACT	AREA CODE/ PHONE NUMBER
Fire/Explosion	Menomonee Falls Fire Department Menomonee Falls Police Department	911 911
Hazardous Material Spill/Release	Menomonee Falls Fire Department Menomonee Falls Police Department National Response Center	911 911 1-800-424-8802
All of the Above	Wisconsin Department of Emergency Government	1-800-943-0003
Injury	Menomonee Falls Rescue Squad Community Memorial Hospital	911 262-257-4710

Give the following information to the notified agencies and authorities:

- Your name and telephone number
- Facility name and address
- Time and type of incident (e.g., release, fire, et. al.)
- The extent of injuries, if any
- Possible hazard to human health or the environment, outside the facility

If additional information is needed regarding the emergency situation, please call:

- National Poison Control Center (404) 588-4400

7.3.2.3 General Responsibilities

The Emergency Coordinator (EC) is responsible for coordinating all emergency response measures during an emergency. The EC is thoroughly familiar with the contingency plan, site operations, waste types handled, facility records and layout. He/she acts as the chief of the emergency crew during each operating shift and has complete and total control of all activities during the incident. He/she has the authority to designate other employees to assist him/her in the event of an emergency. The EC has been granted full corporate authority to expend all pertinent resources to deal with the situation. The EC's comprehensive training is outlined in the Training Plan. The EC or alternate will always be on call and can be reached via telephone or page. The EC will develop and maintain lines of communication with key community emergency services including fire and police agencies, medical facilities, and emergency response units. Section 7.9 delineates the arrangements that will be made with such organization to assure their availability and assistance in emergency situations.

The EC is authorized to activate emergency response procedures by assembling equipment and determining its application. Section 7.5 describes the emergency equipment available to the EC, both from on-site inventories and off-site resources.

All personnel reporting information to an outside response group (or to Veolia's Corporate offices) will do so after the EC indicates the need. The person making such notification will give the following information:

- Your name and telephone number
- Facility name and address
- Time and type of incident (e.g., release, fire, et. al.)
- Name and quantity of material involved, to the extent known
- The extent of injuries, if any
- Possible hazard to human health or the environment outside the facility

7.3.2.4 Identification of Waste Material and Hazard Assessment

As soon as possible, the EC will determine the character, source, and extent of any released materials by visual inspection and reference to manifests, sample analyses, Waste Material Profile Sheets, and other available sources of information.

Initial assessment includes the following parameters:

- Origin of the leak
- Condition of the source: (e.g., repairable leak, uncontrollable leak, easily removed, unmovable)
- Physical state of the spill: (e.g., solid powder, pellet, granular, liquid or gas)
- Odor, if noticed, a pleasant smell, (e.g. almond, ammonia, benzene, vinegar) or an unpleasant smell (e.g., sulfur, skunk, onion, sharp, biting, cleaning fluid, or paint)
- Color of material
- Noticeable reaction: (e.g., fuming, flaming or gas evolution)

After the materials have been identified to the fullest extent possible, the EC must assess possible hazards, both direct and indirect, to human health or the environment, and subsequently notify the appropriate site personnel and authorities.

The EC's hazard assessment will include information gathered from other site personnel. The EC will obtain verbal reports from both the Personnel Coordinator (PC) and Communications Control Officer (CCO) as to the status of all on-site personnel. The PC will relay attendance information taken from the sign-in/sign-out list located at the facility's office. The CCO will relay information concerning injuries or casualties and; if necessary, notify the Menomonee Falls Rescue 911.

Based on knowledge of the existing conditions, the EC will determine the following:

- Can facility personnel control the emergency? If not, immediately notify the appropriate federal, state and local agencies, such as:

National Response Center 1-800-424-8802

Wisconsin Department of
Emergency Government 1-800-943-0003

- Is site evacuation necessary? If so, activate the Evacuation Plan (Section 7.8). If partial evacuation is required, instruct the CCO to designate the location of the on-site re-grouping area.

- Is evacuation of the local area advisable? If so, communicate necessary information to the Menomonee Falls Police Department 911.

7.4 CONTAINMENT AND CONTROL ACTIVITIES

7.4.1 General Procedures

The facility's operations are designed to minimize the potential hazards to facility personnel, and to contain spilled or leaked materials and prevent their movement from the facility. Operational features and response activities are presented below.

7.4.1.1 Facility Provisions

All waste unloading/loading, storage, and treatment units at the facility are equipped with secondary containment systems capable of collecting any spilled wastes and wash water and preventing these liquids from entering surface water run-off. Also, many of these containment areas are housed in buildings so that they will not have to handle large quantities of potentially contaminated rainwater.

All liquid storage and treatment tanks are equipped with level-of-liquid indicators with high-level alarms to prevent spills from over-filling. All storage and treatment units have secondary containment systems to collect and hold waste spills or leaks.

The decanting stations in the Drum Repack/Bulking/Decanting Unit are equipped with fume/vapor

exhaust points which collect potentially toxic vapors to protect operating personnel. These vapors are vented through a suitable control device to prevent atmospheric releases of such vapors.

7.4.1.2 Personnel Response Activities

Veolia – Menomonee Falls is prepared to respond to incidents at the facility that could cause potential emergencies, e.g., fires, explosions, spills or material releases discussed in Section 7.2.4.1. The Emergency Coordinator will determine the seriousness of the incident and whether or not to invoke the Contingency Plan. Containment and control activities are initiated by the Emergency Coordinator who will activate facility personnel responses as follows:

Emergency Coordinator (EC) Activities

For a spill or release, the Emergency Coordinator will mobilize personnel and:

- Assemble the required response equipment: protective clothing and gear, absorbent material, empty drums, drum "overpacks", portable pumps and vacuum trucks.
- Determine the most appropriate means of removing and handling the spilled wastes;
- Coordinate activities of supervisory personnel and maintain constant communication with them and response teams.

For a fire or potential explosion, the EC will mobilize personnel and:

- Assemble required response equipment: protective equipment (protective clothing and gear); fire extinguisher; and empty drums, pumps, vacuum trucks and tank trucks for cleanup or residues;

- Determine the best method of response:
  - Move in from the upwind side;
  - Utilize a dry chemical extinguisher if there is potential for recurrence or flash-back;
  - Utilize dry chemicals for large areas and in situations where flashback potential is low.

Communications Control Officer Activities

For spill release, fire or explosion which required implementation of the Contingency Plan, the Communications Control Officer (CCO) will:

- Coordinate activities and maintain communications with on-site supervisory personnel and response teams;
- Assess extent of injuries or casualties (if any) and relay information to the EC.
- Coordinate movement of personnel to the regrouping area (on Boundary Road at main gate) and relay information to EC.
- Contact corporate office.

Personnel Coordinator Activities

The Personnel Coordinator (PC) will conduct a "head-count" and relay information to EC.

7.4.2 Process-Specific Procedures

This section provides a process-specific Contingency Plan for each of the waste storage and treatment units at the facility. Following a short introduction for each unit, a description of the general safety and operating rules followed to prevent and be prepared for emergencies is provided. Following this, a list of response criteria is given. These criteria will be used to determine whether an emergency exists and whether response action should be implemented. Finally, the procedures that will be followed to respond to emergencies will be provided.

7.4.2.1 Container Storage Unit

Introduction

Containerized wastes received at the existing facility are stored in the Container Storage Unit. The wastes stored in this unit may be ignitable, corrosive, reactive, and toxic. Most of the wastes will be in 55-gallon drums, but other sizes and types of containers will be in inventory. This section does not apply to the storage and handling of lugger boxes, which are covered in a separate section.

General Safety and Operating Rules

Containers are organized into groups of two double-row lots of containers. An aisle space at least 2'6" is maintained between lots in each group to allow for easy inspection. In addition, each group of two lots of containers is separated from adjacent lots by a minimum 6-foot-wide aisle to allow easy access for forklift trucks. Adequate aisle space is maintained for access to all containers within the storage unit. The NFPA Code for Liquid Warehouses is followed in the management of containerized waste stored in these units.

Containers remain closed except to inspect, sample, or decant them (although decanting will not be performed in these units). Containers are unloaded and loaded from and to trucks and moved within the building by forklift trucks or hand trucks with care to avoid puncturing or rupturing them. Incompatible wastes are segregated.

All trucks being loaded or unloaded at the unit are positioned in secondary containment systems to catch any liquid or solid leaks or spills. Rain water and any spilled liquids in secondary containment systems are removed promptly and subsequently treated. No smoking, welding, or other spark-generating activities are allowed in or near these containment storage units.

The inspection Program Plan is implemented to insure daily observations of signs of:

- Damaged or leaking containers
- Liquids in drains or sumps
- Improper aisle space
- Opened containers
- Non-segregation of potentially incompatible wastes

The following equipment will be inspected weekly to assure operational integrity:

- Emergency eyewash and showers
- Fire extinguisher

Violations or malfunctions will be reported to the General Manager or Health, Safety and Environmental Manager who will immediately correct them.

Response Criteria

These items require response procedures when observed by an employee. However, full implementation of the Contingency Plan will be a decision of the Emergency Coordinator based on his/her evaluation as to the threat to human health and the environment.

A. Fire or Explosion
   - Fire in or adjacent to the storage unit
   - Explosion of a container

B. Spills or Material Releases
   - Leaking or structurally damaged containers
   - Gaseous emissions from containers
   - Pool of liquid on floor of unit

Response Procedures

A. Fires or Explosions
   - Evacuate personnel from the area.
   - Call the Menomonee Falls Fire Department for assistance.
   - If fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.
   - If a container has exploded, respond to fire if a fire starts. Otherwise, handle as a spill (see below).

- When emergency is over, clean up affected area, put response equipment back in readiness and restock response supplies.

B. Spills or Materials Releases

- Isolate leaking container and remove contents to another container or place leaking container in an "overpack" drum.
- Clean up leaked material with absorbent.
- Use portable pumps to remove standing liquids in sumps and curbed floor areas.
- Route cleaned-up material to on-site treatment or off-site disposal, as appropriate.
- Immediately decant a container emitting gases if it contains organic wastes compatible with the decant treatment and liquid storage units.

C. Timing and Procedures for Managing Spills and Material Releases

- Spilled wastes and damaged containers will be removed as necessary, as a result of the daily inspections.

- Damaged containers will be removed using hand truck, fork-lift or manually (as appropriate to the situation) and "overpacked" with absorbent material and cleanup residues.

- Contaminated equipment, floors and walls will be scraped, brushed or swept to remove all lose or caked residue. Absorbent material will be utilized to absorb any released liquids. All released waste material and absorbent will be collected and placed into appropriate containers pending ultimate treatment and/or disposal.

7.4.2.2 Drum Repack/Bulking/Decant Units

Introduction

Containers of organic or inorganic wastes are decanted (i.e., emptied of free liquids) at the Drum Repack/Bulking/Decant Unit. Receiving, inspection, and sampling of the wastes will have been previously conducted in the Container Storage Unit. Wastes will be pumped from the containers into a tanker truck. Small volume lab pack waste chemicals are bulked into larger volume containers within the Bulking section of the unit.

Organic and inorganic hazardous wastes are managed at this unit, including ignitable, corrosive, and EP-toxic wastes. No reactive wastes are managed at this unit.

General Safety and Operating Procedures

This unit has multiple decant stations. Wastes are decanted at these stations in a segregated manner. Exhaust ventilation is located over each decant station to remove fumes/vapors that are emitted during decanting. Collected fumes/vapors will be conveyed to a carbon adsorption system and if necessary a wet scrubber system.

Appropriate small and large portable fire extinguishers are installed in the unit and will be maintained and kept fully charged. No smoking, welding, or other spark-generating activities are allowed in or near the unit. As described earlier in this Plan, adequate aisle space is maintained to allow free access into this unit. All hose couplings and valve open/close settings will be checked before waste transfers are made into truck tankers to prevent spills and leaks. The unit has a secondary containment system capable of holding a volume of greater than 5684 gallons. Liquids in the containment system will be removed promptly, and either pumped into one of the decant containers, if found to be compatible with the contents thereof by the tests described in the Waste Analysis Plan or immediately taken off-site for treatment and disposal.

The Inspection Program Plan is implemented to assure observance of the above procedures, to detect

leaks or spills and to check the operability of fire and safety equipment.

Response Criteria

These items require response procedures when observed by an employee; however, full implementation of the Contingency Plan will be a decision of the Emergency Coordinator based on his/her evaluation of the threat to human health and the environment.

A. Fire and Explosion

- Fire in or adjacent to the unit
- Explosion of a container

B. Spills or Material Releases

- Leaking or ruptured container
- Pool of liquid on floor of unit
- Leaking of associated piping, valves, or pumps
- Hose, coupling, or piping breaks during decanting or separation tank loading/unloading operations
- Gaseous emissions from containers or surge and separations tanks

Response Procedures

A. Fire or Explosion

- Evacuate personnel from the unit and vicinity.
- Call the Menomonee Falls Fire Department for assistance.
- Equip all response personnel with chemical-resistant clothing and self-contained breathing apparatus.
- If a fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.

- If a fire is beyond the incipient stage, activate the aqueous foam fire suppression system by means of the pull station.
- Shut off valves, pumps, and electrical service, as appropriate.
- If a container has exploded, respond to fire if a fire starts. Otherwise, handle as a spill (see below).
- When emergency is over, clean up affected area, put response equipment back in readiness and restock response supplies.

B. Spills or Material Releases

- If a container is leaking, follow response procedures outlined for Container Storage Unit.
- If a transfer hose is leaking or overflowing, isolate the hose by shutting off appropriate valves.

- Clean up area affected by the release, repair or replace the transfer hose, clean up and decontaminate response equipment, and re-stock emergency response supplies.

7.4.2.3 Roll-Off/Lugger Box Storage Unit

Introduction

Solid wastes received at the facility in Roll-Off/Lugger Box containers are stored in the Roll-Off/Lugger Box Storage Unit(s) (See Figure 7-2). The wastes stored in this unit(s) may be corrosive and/or toxic, and are held pending on-site treatment or transfer off-site for treatment and disposal.

General Safety and Operating Rules

A minimum 3-foot aisle space is maintained between the sides of the stored Roll-Off/Lugger Box containers and a 3-foot space between the ends of the containers and between container-ends and building walls. Lugger Box containers are not stacked and are set directly on the reinforced concrete

floor, Roll-Offs are also not stacked and set directly on integral "ribs" or "rolls". The exterior reinforcing ribs on the Roll-Off Boxes keeps the shell of the box raised at least 2 inches off the floor, so that the shell of the box is prevented from standing in any liquids.

Containers remain covered except for inspection and/or sampling. Roll-Off/Lugger Box containers are unloaded from the transportation vehicle within the storage unit(s) and, when necessary, moved by special trucks for transfer to other sites. Lugger trucks or Roll-Off trailers are used, taking care to avoid dropping, overturning, puncturing, or rupturing the boxes. Incompatible wastes are segregated (or removed immediately from the facility). The average residence time of wastes in the storage unit is short, typically less than two (2) weeks, before the containers are transferred for on-site treatment or to another facility for treatment and disposal.

Any spilled waste is removed promptly and placed into a suitable container with which it is compatible. Liquids (e.g. wash-waters) accumulating within the existing containment system are removed promptly to avoid the possibility of any containers remaining in standing water. Such liquids, if determined to be hazardous, are used as process water for the Waste Stabilization Unit. No smoking, welding, or other spark-generating activities are allowed in the Roll-Off/Lugger Box Storage Unit.

The Inspection Program Plan is implemented to insure daily observations of signs of:

- Damaged or leaking Roll-Off/Lugger Box containers
- Liquids in drains or sumps
- Improper aisle space
- Uncovered containers
- Non-segregation of potentially incompatible wastes
- Identification of 10 day transfer area

The following equipment is inspected weekly to assure operational integrity:

- Emergency eyewash and showers

- Fire extinguishers

Violations or malfunctions will be reported to the General Manager or Health, Safety and Environmental Manager who will immediately correct them.

Response Criteria

A. Fire or Explosion

- Fire in or adjacent to the storage unit
- Explosion of a Roll-Off/Lugger Box container

B. Spills or Material Releases

- Leaking or structurally damaged Roll-Off/Lugger Box containers
- Gaseous emissions from Roll-Off/Lugger Box containers
- Pool of liquids on floor of unit

Response Procedures

A. Fires or Explosions

- Call the Menomonee Falls Fire Department for assistance.
- Equip fire response personnel with protective clothing and respirators.
- If fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.
- If a Roll-Off/Lugger Box container has exploded, respond to fire if a fire starts. Otherwise, handle as a spill (See below).
- When emergency is over, clean up affected area, put response equipment back in readiness and re-stock response supplies.

B. Spills or Material Releases

- Isolate leaking Roll-Off/Lugger Box container and repair in place if practical and safe or remove contents to another container.
- Clean up leaked material with shovels and handbrooms.
- Use portable pumps to remove any standing liquids in sumps and curbed floor areas.
- Route cleaned-up material to off-site disposal.

C. Timing and Procedures for Managing Spills and Material Releases

- Spilled wastes and damaged Roll-Off/Lugger Box containers will be repaired or removed at least daily or as necessary, as a result of the daily inspections.
- Damaged Roll-Off/Lugger Box containers will be either repaired in place, if feasible and safe, or their contents will be transferred to another, undamaged lugger-box; the lugger-box interior and the spill area will be cleaned up with shovels, brooms, and washing; and the container will be repaired. Repair may be in place or elsewhere.

- Contaminated equipment, floors and walls will be scraped, brushed or swept to remove all loose or caked residue. Absorbent material will be utilized to absorb any released liquids. All released waste material and absorbent will be collected and placed into appropriate containers pending ultimate treatment and/or disposal.

7.4.2.4 Stabilization Unit

Introduction

Bulk and containerized sludge, ash, and other solid waste to be stabilized are placed in the incoming staging area or Roll-Off/Lugger Box Storage Unit. All wastes are received by appointment. After the waste has been analyzed for acceptance, the waste load is moved to the treatment area. In most cases, the waste load will be off-loaded immediately into the stabilization process. The stabilization process is a chemical/physical process which stabilizes wastes by immobilizing the hazardous constituents. The treated wastes are placed into roll-off containers and transferred to the Roll-Off Accumulation Area for curing as site generated waste. The stabilized wastes are held in the accumulation area pending transfer off-site for disposal.

General Safety and Operating Rules

The existing Waste Stabilization Process utilizes a pug mill, backhoe, steel bin, a grinder, a waste storage tank, and various transfer conveyors. Various wastes are processed in a segregated manner. The equipment is designed with dust controls and overfill prevention features. Fire extinguishers are installed in the unit and will be maintained and kept fully charged. No welding, or other spark-generating activities will be allowed at or near the Waste Stabilization Process until safe conditions are established. Caged safety ladders and railed catwalks, as appropriate, are provided to ensure personnel safety. Adequate aisle space is maintained to allow free access to this unit.

The unit design includes secondary containment system capable of holding the volume of the largest tank.

Any spilled waste is collected and either processed in the Waste Stabilization Unit or placed in a suitable container with which it is compatible for transfer off-site for disposal. Liquids (e.g., wash-waters) accumulating within the containment system are removed promptly to avoid the possibility of any equipment remaining in standing water. Collected liquids are used as process make-up water for the Waste Stabilization Process, or properly disposed of off-site.

The Inspection Program Plan is implemented to assure observance of the above procedures to detect leaks or spills, to check the operability of fire and safety equipment, and to perform periodic maintenance.

Response Criteria

A. Fire and Explosion

- Fire in or adjacent to the Waste Stabilization Processing Unit
- Explosion of a container

B. Spills or Material Releases

- Leaks or spills from the pug mill, grinder, tank or other process equipment
- Overflow
- Dusty emissions

Response Procedures

A. Fires or Explosions

- Evacuate personnel from the unit and vicinity.
- Call the Menomonee Falls Fire Department for assistance.
- Equip all response personnel with chemical resistant clothing and self-contained breathing apparatus.
- If a fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher. Water will also be available.
- Shut off valves, pumps, and electrical service, as appropriate.
- Initiate facility evacuation plan.
- If any portion of the Waste Stabilization Process has exploded, immediately evacuate the facility and respond to any fire, as described above, and/or respond to spillage of wastes, as described below.
- When emergency is over, clean up affected area, put response equipment back in readiness, and re-stock emergency response supplies.

B. Spills and Material Releases

- Equip response personnel with appropriate protective gear.
- Shut off valves, pumps, and electrical equipment, as appropriate.
- If the Waste Stabilization Process itself is leaking or overflowing, remove the wastes to appropriate containment such as roll-off boxes.
- If a valve, pipe, hose, or pump is leaking or spilling, isolate this equipment by shutting off appropriate valves.

- Remove materials from secondary containment and dispose of by either processing through the Waste Stabilization Process or by shipment to an off-site facility.

7.4.2.5 Roll-Off Storage

Introduction

Stabilized wastes are placed in roll-off containers and transferred to the associate Roll-Off Accumulation Area for curing. The stabilized wastes are held in this area pending transfer off-site for disposal.

General Safety and Operating Rules

A minimum 3-foot aisle space is maintained between the sides of the roll-off containers and a 3-foot space between the ends of the containers and between container ends and building walls. The roll-off containers are not stacked and are set directly on the reinforced concrete floor. The wheels on the containers keep the shell of the containers raised at least 2 inches off the floor, so that the shell of the container is prevented from standing in any liquids.

Any spilled wastes are removed promptly and placed in a suitable container(s) with which it is compatible, or re-introduced to the Waste Stabilization Process if appropriate. Liquids (e.g., washwaters) accumulating within the existing containment system are removed promptly to avoid the possibility of any roll-off containers remaining in standing water. Collected liquids are used as process make-up water for the Waste Stabilization Process, or disposed of properly off-site.

No smoking, welding, or other spark-generating activities are allowed in or near these containers.

The Inspection Program Plan is implemented to ensure daily observation of signs of:

- Damaged or leaking roll-off containers

- Liquids in drains or sumps
- Improper aisle space
- Uncovered containers

The following equipment is inspected weekly to assure operational integrity:

- Emergency eyewash and showers
- Fire extinguishers

Violations or malfunctions will be reported to the General or Health, Safety and Environmental Manager who will immediately correct them.

Response Criteria

A. Fire or Explosion

- Fire in or adjacent to the storage unit
- Explosion of a container

B. Spills or Material Releases

- Leaking or structurally damaged containers
- Gaseous emissions from containers
- Pool of liquids on floor of unit

Response Procedures

A. Fires or Explosions

- Call the Menomonee Falls Fire Department for assistance.

- Equip fire response personnel with protective clothing and respirators.
- If fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.
- If an explosion has occurred, respond to fire if a fire starts. Otherwise, handle as a spill (See Below).
- When emergency is over, clean up affected area, put response equipment back in readiness and re-stock response supplies.

B. Spills or Material Releases

- Isolate leaking container and repair in place if practical and safe or remove contents to another container.
- Clean up leaked material with shovels and handbrooms.

- Use portable pumps to remove any standing liquids in sumps and curbed floor areas.
- Route cleaned-up material to be stabilized if deemed appropriate or sent for off-site disposal.

C. Timing and Procedures for Managing Spills and Material Releases

- Spilled wastes and damaged containers will be repaired or removed at least daily or as necessary, as a result of the daily inspections.

- Damaged containers will be either repaired in place, if feasible and safe, or their contents will be transferred to another, undamaged container; the container interior and the spill area will be cleaned up with shovels, brooms, and washing; and the container will be repaired. Repair may be in place or elsewhere.

- Contaminated equipment, floors and walls will be scraped, brushed or swept to remove all loose or caked residue. Absorbent material will be utilized to absorb any released liquids. All released waste material and absorbent will be collected and placed into appropriate containers pending ultimate treatment and/or disposal.

7.4.2.6 Container Storage Truck Loading/Unloading Dock Area

Introduction

All trucks being loaded or unloaded at the Container Storage Unit are positioned in a bay provided with containment. Most of the wastes in the trucks will arrive in 55-gallon drums.

General Safety and Operating Rules

No smoking, welding, or other spark-generating activities are allowed in or near this loading/unloading dock area.

Response Criteria

These items require response when observed by an employee. However, full implementation of the Contingency Plan will be a decision of the Emergency Coordinator based on his/her evaluation as to the threat of human health and the environment.

A. Fire or Explosion

- Fire in or adjacent to the storage unit
- Explosion of a container

B. Spills or Material Releases

- Leaking or structurally damaged containers
- Gaseous emissions from containers
- Pool of liquids on floor of unit

Response Procedures

A. Fires or Explosions

- Call the Menomonee Falls Fire Department for assistance.
- Equip fire response personnel with protective clothing and respirators.
- If fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.
- If an explosion has occurred, respond to fire if a fire starts. Otherwise, handle as a spill (See Below).
- When emergency is over, clean up affected area, put response equipment back in readiness and re-stock response supplies.

B. Spills or Material Releases

- Close the discharge valves associated with the spill collection sump.
- Isolate leaking container from truck and remove contents to another container or place leaking container in an "overpack" drum.
- Use portable pumps to remove standing liquids in sumps and floor areas.
- If spilled material has entered system retention tanks, remove the liquid and.
- Immediately clean system retention tanks to prevent contamination of future rainwater that accumulates in the tanks.
- Route cleaned-up material to on-site treatment or off-site disposal, as appropriate.

C. Timing and Procedures for Managing Spills and Material Releases

- Releases will be immediately cleaned up.
- Contaminated floors, sumps and tanks will be cleaned to remove all residue.
- Absorbent material will be utilized to absorb and released material. All released waste material and absorbent will be collected and placed into appropriate containers pending ultimate treatment and/or disposal.

7.4.2.7 Household Hazardous Waste and VSQG Waste Collection Operations

Introduction

Wastes will be delivered to the collection facility in the visitor's vehicle. The visitors will enter the facility through the north gate and be directed by Veolia personnel to the collection facility. Veolia personnel will remove the wastes from the visitor's vehicles and segregate the wastes by hazard class. The segregated wastes will either be placed on the carts or the bulking table or placed directly into bulk, generic lab pack, or traditional lab pack containers.

In addition, these wastes may be processed in the Drum Repack/Bulking/Decant unit or the HHW processing area located southwest of the Non-Hazardous Processing building.

General Safety and Operating Rules

No smoking, welding, or other spark-generating activities are allowed in or near these operations.

Response Criteria

These items require response when observed by an employee. However, full implementation of the Contingency Plan will be a decision of the Emergency Coordinator based on his/her evaluation as to the threat of human health and the environment.

A. Fire or Explosion
   - Fire in or adjacent to the storage unit
   - Explosion of a container

B. Spills or Material Releases
   - Leaking or structurally damaged containers
   - Gaseous emissions from containers
   - Pool of liquids on floor of unit

Response Procedures

A. Fires or Explosions

- Call the Menomonee Falls Fire Department for assistance.
- Equip fire response personnel with protective clothing and respirators.
- If fire is in the incipient stage, attempt to extinguish with appropriate fire extinguisher.
- If an explosion has occurred, respond to fire if a fire starts. Otherwise, handle as a spill (See Below).
- When emergency is over, clean up affected area, put response equipment back in readiness and re-stock response supplies.

B. Spills or Materials Releases

- Isolate leaking container and remove contents to another container or place leaking container in an "overpack" drum.
- Clean up leaked material with absorbent.
- Use portable pumps to remove standing liquids in sumps and curbed floor areas.
- Route cleaned-up material to on-site treatment or off-site disposal, as appropriate.
- Immediately decant a container emitting gases if it contains organic wastes compatible with the decant treatment and liquid storage units.

C. Timing and Procedures for Managing Spills and Material Releases

- Spilled wastes and damaged containers will be removed as necessary, as a result of the daily inspections.

- Damaged containers will be removed using hand truck, fork-lift or manually (as appropriate to the situation) and "overpacked" with absorbent material and cleanup residues.

- Contaminated equipment, floors and walls will be scraped, brushed or swept to remove all lose or caked residue. Absorbent material will be utilized to absorb any released liquids. All released waste material and absorbent will be collected and placed into appropriate containers pending ultimate treatment and/or disposal.

Figure 7-8 shows HHW storage locations.

7.5 AVAILABLE EMERGENCY EQUIPMENT

The facility will maintain an alarm, two-way radio, and/or telephone communication system, on-site equipment suitable for emergency response, and accessibility to off-site resources. The on-site equipment will enable facility personnel to react and respond to the majority of emergency incidents which may arise. If needed, supplemental emergency equipment supplies will be available from outside sources.

7.5.1 Alarm and Communication Systems

The facility will be equipped with telephone to link both on-site and off-site resources. Telephones in the existing facility are located in the following buildings:

- Administration Building
- Container Storage Building
- Waste Stabilization and Storage Building
- Non-Hazardous Waste Processing Building
- Laboratory

Two-way radios are available for reporting on-site emergency response activities.

An evacuation alarm system has been installed at the facility. This system has an outside horn and can be activated from the following locations:

- Container Storage Building
- Laboratory
- Administration Building
- Drum Repack/Bulking/Decant Building
- Waste Stabilization and Storage Building
- Non-Hazardous Waste Processing Building
- Household Hazardous Waste Depack Building

This alarm is designed to emit a warning signal and is capable of being heard at all parts of the facility.

7.5.2 On-Site Equipment

The location of the fire and safety equipment at the existing facility is shown in Figure 7-4.
A list of the personnel safety and first aid equipment maintained at the existing facility is given in Table 7-6.

The Container Storage unit and the Drum Repack/Bulking/Decanting units are equipped with an aqueous foam fire suppression sprinkler system. These systems activate automatically whenever a sprinkler head is subjected to enough heat to cause the sprinkler to activate the system. In addition, the systems in the Repack/Bulking/Decanting units can also be activated by means of a manual pull station in each area.

In addition the facility office and shop areas are equipped with a water sprinkler system.

The spill containment and clean-up equipment that is available at the existing is listed in Table 7-4.

As a standard safety practice, all employees are issued the following safety equipment. This

equipment must be worn when sampling, loading and unloading wastes, or working in the waste storage and treatment areas:

- Hardhats and safety glasses
- Steel-toed boots
- Protective coveralls
- Respirators, when appropriate

The equipment in Table 7-4 will be stored in various locations around the facility where it may be most beneficial in emergency incidents. Examples are:

a. Forklifts--maintenance area (garage), Non-Haz. building, or Stabilization building;
b. Pumps and hoses--maintenance area;
c. Empty drums--in drum storage building(s) or Depack area;
d. Empty lugger/Roll-off boxes--in lugger/Roll-off-box storage area;
e. Clean-up materials--in each area where spills are possible, small "clean-up kits" (drums, shovels, brooms, clean-up materials) are strategically located. Stockpiles of clean-up materials are stored in the maintenance area;
f. Fire extinguishers--as noted in Figure 7-4 and associated drawings.

7.5.3 Off-Site Resources

Supplemental emergency equipment and supplies will be available, if needed, from the Menomonee Falls Fire Department and the Menomonee Falls Rescue Squad. In addition, Veolia-MF has arranged for the following contractor to assist in emergency cleanup.

Veolia ES Industrial Services, L.L.C.
N104 W13275 Donges Bay Road
Germantown,WI 53022
(262) 236-8130
(800) 688-4005

Veolia-Menomonee Falls reserves the right to use other outside contractors as necessary.

7.6 CASUALTY CONTROL

During the course of any emergency which activates the Contingency Plan, all injuries or other casualties will be given first aid, if necessary. For more serious injuries, outside medical assistance will be used. During an emergency situation, the Emergency Coordinator will accomplish the following:

- Assess the casualty situation, and determine the need to summon emergency medical assistance from the Menomonee Falls Rescue Squad. Meet incoming emergency/medical assistants and guide them to the first aid stations or the location of the emergency.

- Designate, organize, and direct available first aid personnel. The first aid station will be located in the Office Building (if accessable).

- Access information regarding injury-causing agents, including toxicity and decontamination. If needed, the following organizations can provide emergency chemical information:

  National Capital Poison Center 1-800-222-1222

- Injured personnel will be placed in the care of qualified medical personnel. The Emergency Coordinator will provide casualty control resources to the medical service person in charge.

- If victims are removed from the facility, the medical service person in charge will notify the appropriate hospital or emergency room of the arrival of casualties, nature of injury, information on toxicity, and any other pertinent information. Such information shall be promptly transmitted to those with a need-to-know.

7.7 EVACUATION PLAN

The Emergency Coordinator, or alternate, is the only person authorized to call for complete evacuation of the site in response to an emergency situation that threatens the health and safety of facility personnel. The EC may take this action based upon his/her analysis of the situation or at the request of an on-scene public emergency services coordinator, (e.g., Police Chief, Fire Chief).

7.7.1 Site Access and Egress

Evacuation routes for the facility are shown in Figure 7-5.

The site is designed and operated to facilitate access to all points across the site for inspection and emergency response. Enclosed processing areas are equipped with adequate doors and aisle space within the buildings.

Since facility access will normally be restricted, except for persons assisting in the response efforts, security will be maintained during an emergency event. A detailed count of personnel admitted to the site during an emergency will be maintained. To maintain security, access points to the site utilized during an emergency situation will be continuously monitored, to the extent possible.

7.7.2 Evacuation Procedures

The following actions will be taken when the EC orders a site evacuation:

1. The EC or Facility Manager will immediately activate emergency services by calling the Menomonee Falls Police Department for assistance, reporting any casualties and arranging for their emergency care by calling the Menomonee Falls Rescue Squad. The EC will coordinate activities with these agencies.

2. The EC will communicate evacuation instructions to waste storage building employees via the facility's telephone intercom system and 2-way radios. In the absence of an area supervisor, the corresponding senior operator will substitute for her/him in the evacuation process.

3. The EC or the Facility Manager will determine which gates will be used depending upon the locations of the incident, wind direction and personnel.

4. The Emergency Coordinator will designate an employee who will unlock the required exit gates immediately. All but the main gates will be locked during normal operations for security reasons; however, keys will be available from the:

   - General Manager
   - Environmental Health and Safety Manager
   - Emergency Coordinator and alternates

5. All personnel, including visitors and contractors, will immediately leave through the exit gates designated by the EC.

6. Evacuation should proceed as follows:

   If downwind of the incident, evacuate perpendicularly to the wind direction over the most accessible route.

   If upwind of the incident, evacuate in upwind direction.

7. Personnel will normally re-group outside of the main gate(South) on Boundary Road.

8. The personnel Coordinator (PC) will initiate a "head-count" and check it against the sign-in/sign-out sheets located in the Office and Laboratory. The PC will account for facility personnel at the re-grouping area. This information will be transferred to the EC and CCO.

9. All attempts to rescue or find persons unaccounted for will be directed by the command office of the police/fire department.

7.7.3 Community Impact Considerations

In anticipation of the possibility, however remote, that areas adjacent to or near the site may be endangered due to fire, explosion, spill, or materials-release on-site, a Veolia representative will have discussed procedures for evacuating the surrounding areas with local authorities. Consistent with these discussions and the local agreement included in Section 7.9, the following responsibilities have been determined:

- The Emergency Coordinator will notify the local authorities of the possible need to evacuate off-site areas. This need will depend on the nature, extent and rate of spread (including direction) of potential hazards to surrounding areas.

- Until local units can respond, facility personnel will, under the Emergency Coordinator's direction, initiate roadblocks and evacuation procedures for areas adjacent to the site.

- The Emergency Coordinator will maintain communications with local authorities and assist in the coordination of evacuation, emergency response and casualty control activities.

7.7.4 Re-Occupancy of Facility

The determination of when the facility may be safely reoccupied will be made by the EC in consultation with responding emergency services agencies. Site activities will only resume after the EC has given an "all clear" notification.

7.8 POST-EMERGENCY PROCEDURES

Post-emergency procedures are designed to prevent recurrence, to clean up and dispose of residuals, to decontaminate equipment and to provide for personnel debriefing.

7.8.1 Prevention of Recurrence

The Emergency Coordinator will take all necessary steps to ensure that a secondary release, fire or

explosion does not re-occur after an initial incident. Procedures that will be carried out include:

- Monitoring of all pressure valves;
- Inspection for any leaks or cracks in pipes, valves, tanks and drums;
- Inspection for gas generation;
- Isolation of all collected waste materials.

All operations that were initially shut down during response to the incident will not be reactivated until the EC gives the "go-ahead" signal.

7.8.2 Treatment and Disposal of Released Materials and Clean-Up Residues

Once the emergency situation has ended, the EC will initiate cleanup and disposal of the residues. This will occur as soon as possible in order to avoid further contamination or incident recurrence. Contaminated and other affected areas and equipment will be identified and marked as restricted areas. In any case, the standard segregation techniques discussed in Section 3.0 are used to categorize all wastes on the site based on their dominant characteristics and to route the wastes to separate areas and treatment units based on such characteristics. This makes it even more unlikely that any waste would be placed among other wastes with which it is incompatible.

Liquid spills occurring within a containment system (e.g., drum decant unit, including unplanned releases from tanks, equipment, and interconnecting piping) will be analyzed and pumped out into drums or tanker trucks using portable pumps for treatment at the facility or transfer to an off-site facility for disposal, whichever is appropriate. Small spills or leaks of wastes including those from tanks, equipment, and interconnecting process piping will be cleaned up with adsorbents and sent to off-site disposal. If any containers are found to be leaking, they will be immediately segregated and re-packaged in a steel drum or drum "overpack".

7.8.3 Equipment Decontamination and Maintenance

After cleanup procedures are complete, all equipment used during the cleanup will be decontaminated and readied for future use. Fire extinguishers will be recharged, personnel protective equipment replaced, and absorbent materials re-stocked. Before operations can be resumed an inspection of all safety equipment will be conducted.

7.8.4 Personnel Debriefing and Retraining

The Emergency Coordinator will conduct debriefings of site supervisory, operating personnel and local authorities to assess preparedness and prevention activities, response activities, casualty control and evacuation procedures. Based on this review, suggestions for revisions to the Contingency Plan will be made to facility management.

7.9 ARRANGEMENTS WITH LOCAL AUTHORITIES (AND OTHER RESOURCES)

Veolia-Menomonee Falls has contacted those local agencies that may be involved in an emergency situation. Each of the agencies has been provided with a current copy of the Contingency Plan and relevant background information. Arrangements regarding their specific involvements and coordination have been made and are listed in Table 7-5. Contact with each of the agencies is on-going to keep the arrangements current.

7.9.1 Emergency Response Agencies

The Menomonee Falls Police Department has been requested to provide a support role in facilitating the movement of emergency personnel and equipment and to take the lead in the evacuation of areas surrounding the site, as necessary.

The Menomonee Falls Fire Department has been provided a copy of the Contingency Plan and has been given a tour of the facility to discuss specifics of the emergency response procedures, and the hazardous wastes and materials handled at the facility.

Community Memorial Hospital of Menomonee Falls has been identified as the nearest health care facility and, as such, has been used in the past for minor personnel health emergencies. Veolia – Menomonee Falls will also be utilizing their services as described for emergency situations, as noted in this Contingency Plan.

7.10 INCIDENT REPORTING

Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act

(CERCLA) requires that immediate notification be made to the National Response Center (1-800-424-8802) whenever there is a release of a hazardous substance into the environment in amounts of equal or greater than the "reportable quantity".

RCRA [Part 264.56(j)] further states that any emergency event requiring the implementation of the Contingency Plan will be reported in writing within fifteen (15) days to the EPA Regional Administrator. A similar report must be submitted to the Wisconsin Department of Natural Resources within fifteen (15) days. These reports must be sent to, respectively:

Regional Administrator
United States Environmental Protection Agency
Region V Office
Mail Code R-19J
77 W. Jackson Blvd.
Chicago, Illinois 60604

Wisconsin Department of Natural Resources
2300 N. Martin Luther King Jr. Drive
Milwaukee, Wisconsin 53212

Veolia-Menomonee Falls also is required to follow internal, corporate and regional notification procedures. If an incident occurs, a report similar to the one required by the State and Federal agencies must be submitted to Veolia Corporate office. The information will also be incorporated into the operating record.

7.10.1 Incident Mitigated On-Site (Contingency Plan not implemented)

- Report incident to Veolia Corporate Health and Safety Director or Environmental Director verbally at the time of the incident and submit a completed incident report form, shown in Figure 7-7, after the incident is controlled.

- File incident report with General Manager and maintain incident reports in central file using a form of the type shown in Figure 7-7.

7.10.2 Incident Implementing Contingency Plan

- Report incident to local authorities and request emergency support, as needed.

- If off-site human health or environment are threatened, report incident verbally to National Response Center 1-800-424-8802, Wisconsin Department of Emergency Government 1-800-943-0003 and U.S.EPA Regional Office immediately.

- Report the incident to Veolia Corporate Health and Safety Director or Environmental Director verbally at the time of the incident and submit a completed incident report form, at least equivalent to that shown in Figure 7-7 after the situation is controlled.

- Concurrent with resumption of operations and after cleanup, a report of the incident will be made to the state and/or EPA Regional office.

7.11 AMENDMENTS TO CONTINGENCY PLAN

This Contingency Plan is subject to review and amendment, if:

1. The Plan fails in an emergency.

2. The facility is revised.

3. The facility changes in design, construction, operation, maintenance, or if other circumstances develop that materially increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes in the response necessary in any emergency.

4. The list of Emergency Coordinators and/or alternates changes.

5. The list of emergency equipment changes substantially.

When the Contingency Plan is amended for any reason, each area amended will be reviewed and discussed with all appropriate agencies or emergency response authorities. New Contingency Plan documents will be prepared and distributed to local, state, and federal agencies, and to facility personnel responsible for its implementation.

Written notifications to applicable local authorities with a copy of the revised Contingency Plan will be sent within one week of completing the revision of the Contingency Plan. Each of the notified authorities will be contacted by telephone and/or in person to discuss the Plan and to answer questions. Authorities to be contacted include:

- Community Memorial Hospital
- Menomonee Falls Fire Department
- Menomonee Falls Police Department

TABLE 7-1

EXAMPLES OF WASTE TO BE MANAGED AT VEOLIA – MENOMONEE FALLS

STORAGE AND REPACK/BULKING/DECANT UNITS

WASTE

Recoverable and Non-Recoverable Organic Wastes

1. Non-Halogenated Solvent Wastes
2. Halogenated Solvent Wastes
3. TCLP Wastes
4. Wood Preservative Wastes
5. Ink and Dye Wastes
6. Organic Chemical Manufacturing Wastes
7. Pesticide/Herbicide Wastes
8. Petroleum Wastes

Inorganic Wastes

9. Corrosive Wastes
10. TCLP Wastes (Metals)
11. Treatment Residuals
12. Inorganic Chemical Manufacturing Wastes
13. Metal Finishing/Treating Wastes (Non-Reactive)

Reactive Wastes

14. Reactive Wastes
15. Metal Finishing Wastes (Reactive)

STABILIZATION UNIT

WASTE

1. TCLP Waste
2. Corrosive Treatment Residuals
3. Treatment Residuals
4. Metal Finishing/Treating Wastes (Non-Reactive)
5. Reactive Wastes
6. Metal Finishing/Treating Wastes (Reactive)

TABLE 7-2
NOTIFICATION SUMMARY
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

ON-SITE NOTIFICATION

Report all emergencies to the Emergency Coordinator or his/her alternate.

Internal Communication System

Telephone:	Tom Daly (EC)	Extension	72609
	Office	Extension	72602
	Container Storage Building	Extension	72645
	Stabilization Building	Extension	72644
	Nonhazardous Building	Extension	72643

EMERGENCY COORDINATOR (EC) AND ALTERNATES

Name	Home Phone #	Office Phone #	Home Address
Tom Daly (EC)	(262) 781-7258	(262) 424-5032	W142 N4975 Golden Fields Dr. Menomonee Falls, WI 53051
Charles Elliott	(414) 476-8726	(262) 893-1482	2467 North 63rd Street Wauwatosa, WI 53213
Bob Pietsch	(262) 785-1791	(262) 424-4548	16135 W. El Dorado Drive New Berlin, WI 53151
John Flaminio	None	(773) 469-8012	7702 Milwaukee Ave. Wauwatosa, WI 53213
Dan Backley	(262) 502-0003	(262) 255-6655 ext. 72606	N108 W16205 Hawthorne Germantown, WI 53022
Richard Wade	(920) 251-2973	(262) 255-6655 ext. 72623	275 E. Second St. Fond du Lac, WI 54935.
Joe Baumann	(262) 306-1032	(414) 507-7300	632 Highland View Dr. West Bend, WI 53095
Bob Kann	(262) 629-5469	(262) 255-6655 ext.72614	8440 Fairview Dr. Allenton, WI 53002
Paul McShane	(262) 246-3963	(262) 617-1743	N59 W24320 Eagle Ridge Sussex, WI, 53089

Emergency Coordinator (EC) and Alternates (Continued)

Name	Home Phone #	Office Phone #	Home Address
Dan Capelle	(262) 618-4083	(920) 960-9437	W75 N761 Tower Ave. Cedarburg, WI 53012
Grant Witte	(262) 375-8707	(262) 993-1502	W59 N364 Hilbert Ave. Cedarburg, WI 53012
Bill Banks	(920) 528-8818	(262) 255-6655 ext. 72625	W7670 CTH SS Adell, WI 53001
Al Kountz	(262) 468-4114	(262) 617-2412	36016 Sylvan Lane Oconomowoc, WI 53066
Bill Schreiner	(414) 476-7300	(262) 255-6655 ext. 72627	119 North 79th Street Milwaukee, WI 53213
Don Mitchell	(920) 452-4619	(262) 224-4961	738 Weeden Creek Rd Sheboygan, WI 53081
Bill Will	(920) 999-4204	(414) 640-9794	W251 Sandhill Ct. St. Cloud, WI 53079
John Mueller	(262) 820-0847	(262) 224-8152	N87 W24189 North Lisbon Rd. Sussex, WI 53089
Jim Olszewski	(414) 764-2441	(262) 255-6655 Ext. 72602	7593 S. Manor Ave. Oak Creek, WI 53154
Greg Holtzen	(414) 975-9390	(414) 861-2891	2909 N. 88th Street Milwaukee, WI 53222
Scott Shiner	(414) 477-8411	(262) 255-6655 ext. 72602	PO Box 361 Germantown, WI 53022
Miguel Perez	(414) 708-3306	(262) 501-3785	2046 S. 12th Street Milwaukee, WI 53204
Thomas Allen	(414) 476-7718	(262) 424-4342	2847 N. 85th Street Milwaukee, WI 53222
Henry Brady	(920) 212-0066	(262) 255-6655	W172 N11399 Division Road, Apt # 3 Germantown, WI 53022
Andy Taft	(262) 957-0177	(262) 255-6655 Ext. 72602	2413 Deerfield Ave. West Bend, WI 53090
Todd Guse	(262) 299-1113	(262) 312-8481	6805 Old Apple Lane West Bend, WI 53090
Steve Bertholf	(414) 744-2562	(262) 255-6655 Ext. 72602	2835 E. Grange Ave. Cudahy, WI 53110

The Emergency Coordinator will notify the following facility personnel:

Casualty Control Officer (CCO) and Alternates

Name	Home Phone Number	Office Phone Number
Dan Capelle	(414) 476-9090	(920) 960-9437
Richard Wade	(920) 251-2973	(262) 255-6655 ext. 72623
Bill Schreiner	(414) 476-7300	(262) 255-6655 ext. 72627

If casualties are involved, the CCO immediately notifies the Menomonee Falls Rescue Squad at (262) 251-1140 or 911.

If evacuation is necessary, the EC or CCO will notify the Menomonee Falls Police and Fire Departments.

Personnel Coordinator (PC)

Name	Home Phone Number	Office Phone Number
Bob Pietsch (PC)	(262) 785-1791	(262) 424-4548
Bob Kann	(262) 629-5469	(262) 255-6655 ext. 72614
Henry Brady	(262) 623-1530	(262) 255-6655 ext. 72610

The PC initiates a “head count” of all site personnel during an emergency.

Communications Coordinator (CC)

Name	Home Phone Number	Office Phone Number
Charles Elliott	(414) 476-8726	(262) 893-1482
Tom Daly	(262) 781-7258	(262) 424-5032
John Flaminio	None	(773) 469-8012

The CC will notify one of the following Veolia Regional or Corporate Management personnel of the emergency:

1.	Tom Baker	Office:	(973) 691-7330
		Cellular:	(908) 303-1635
		Home:	(908) 832-6498
2.	Mike Richter	Office:	(973) 691-7332
		Cellular:	(973) 615-0637
		Home:	(610) 588-6334

After this initial contact, the CC will communicate with the same designated representative at the regional or corporate office throughout the emergency.

The EC or his/her designate is required to immediately notify the National Response Center at **(800) 424-8802**, if a "reportable quantity" has been released. The Wisconsin Department of Emergency Government must be notified at **(800) 943-0003**, if a release of any quantity of a hazardous material occurs outside of secondary containment.

The "reportable quantity" of a hazardous substance is one pound unless otherwise specified by Section 311 of the Clean Water Act. A list of the substances and quantities is on file at the facility. Revisions to 49 CFR 172.101 has increased some of the "reportable quantities" to greater than one pound.

TABLE 7-3

EVALUATION CRITERIA FOR IMPLEMENTATION OF CONTINGENCY PLAN

Fire and/or Explosion

- Fire which may cause the release of toxic fumes.
- Fire which may spread and could possibly ignite materials at other locations on-site or off-site, or could cause heat-induced leaks or explosions.
- The use of fire suppressants; either chemicals or water could result in contaminated run-off.
- Explosion which has or could:
  - result in danger from flying fragments or shock waves;
  - ignite other hazardous waste at the facility;
  - release toxic materials.

Spills or Material Releases

- A spill that has or could release toxic vapors or significant flammable liquids or vapors, thus representing a fire or gas explosion hazard.
- A spill outside of a secondary containment unit which could result in off-site or on-site soil contamination and/or surface water contamination.
- A spill that could endanger human health or the environment for other reasons.
- Initiation of containment and control procedures determined by the Emergency Coordinator, as described in Section 7.4.
- The Personnel Coordinator (PC) will account for all facility personnel/visitors by comparing a "head count" with sign-in/sign-out forms.
- Implementation of internal notification (below) and provision of authorities with an assessment of the situation, requesting assistance as necessary.
- Coordination of first-aid activities, if casualties are involved, and activation of the casualty control procedures, described in Section 7.7.
- Evacuation, if required, by activation of the Evacuation Plan described in Section 7.8.

TABLE 7-4

MAJOR EMERGENCY EQUIPMENT AND SUPPLIES

The following major emergency equipment and supplies are or will be maintained at the existing and expanded facility as indicated:

Type	Description	Capability
Forklift truck	Diesel, propane, or electric-powered forklifts of various configurations	Move equipment and supplies into an emergency area, move drums out
Portable pumps and hoses	Small gasoline, air and electric-powered pumps and associated fittings and hoses	Remove liquids from contained areas into tank storage, drums or tank trucks
Empty and overpack drums	Empty--55-gallon steel open and closed-top drums Overpack--85-gallon steel open-top drums	Store compatible materials from spill cleanups, leaking drums, etc.
Empty lugger/roll-off boxes (lined)	2,000-gallon lugger boxes or 20-cubic yard roll-off boxes, lined with plastic sheeting	Store compatible materials from spill cleanups, etc.
Clean-up materials	Dry bulk materials, stored in bulk or in 50 to 100-pound sacks	Adds bulk to liquid and sludge spills, easier to pick up small quantities
Fire extinguishers*	Various types including 10-pound dry chemical ABC; two and one-half-gallon aqueous film foam (Class AB); Class D metal fire; 9-pound ABC Halon or 5-pound ABC Halon	Can extinguish small fires (of appropriate types) in the incipient stages
Wheeled Dry Chemical Fire Extinguishers*	Large (125 / 150-pound) wheeled ABC fire extinguishers (4)	For response to larger fires (than previously described fire extinguishers) which are still in incipient stages

*Primary source of fire protection is the off-site fire department described elsewhere in the text.

TABLE 7-5
COORDINATION AGREEMENTS

A. Menomonee Falls Fire Department and Rescue Squad

- The department has received a copy of this Plan.
- Facility personnel will contact the department annually to discuss the Plan and answer questions.
- The department has been invited to periodically visit the facility.

B. Menomonee Falls Police Department

- The department has received a copy of this Plan.
- Facility personnel will contact the department annually to discuss the Plan and answer questions.
- The department has been invited to periodically visit the facility.

C. Community Memorial Hospital

- The hospital has received a copy of this Plan.
- Facility personnel will contact the hospital annually to discuss the Plan and answer questions.
- Hospital personnel have been invited to visit the facility.

TABLE 7-6

PRINCIPAL INVENTORY OF PERSONNEL SAFETY AND FIRST AID EQUIPMENT

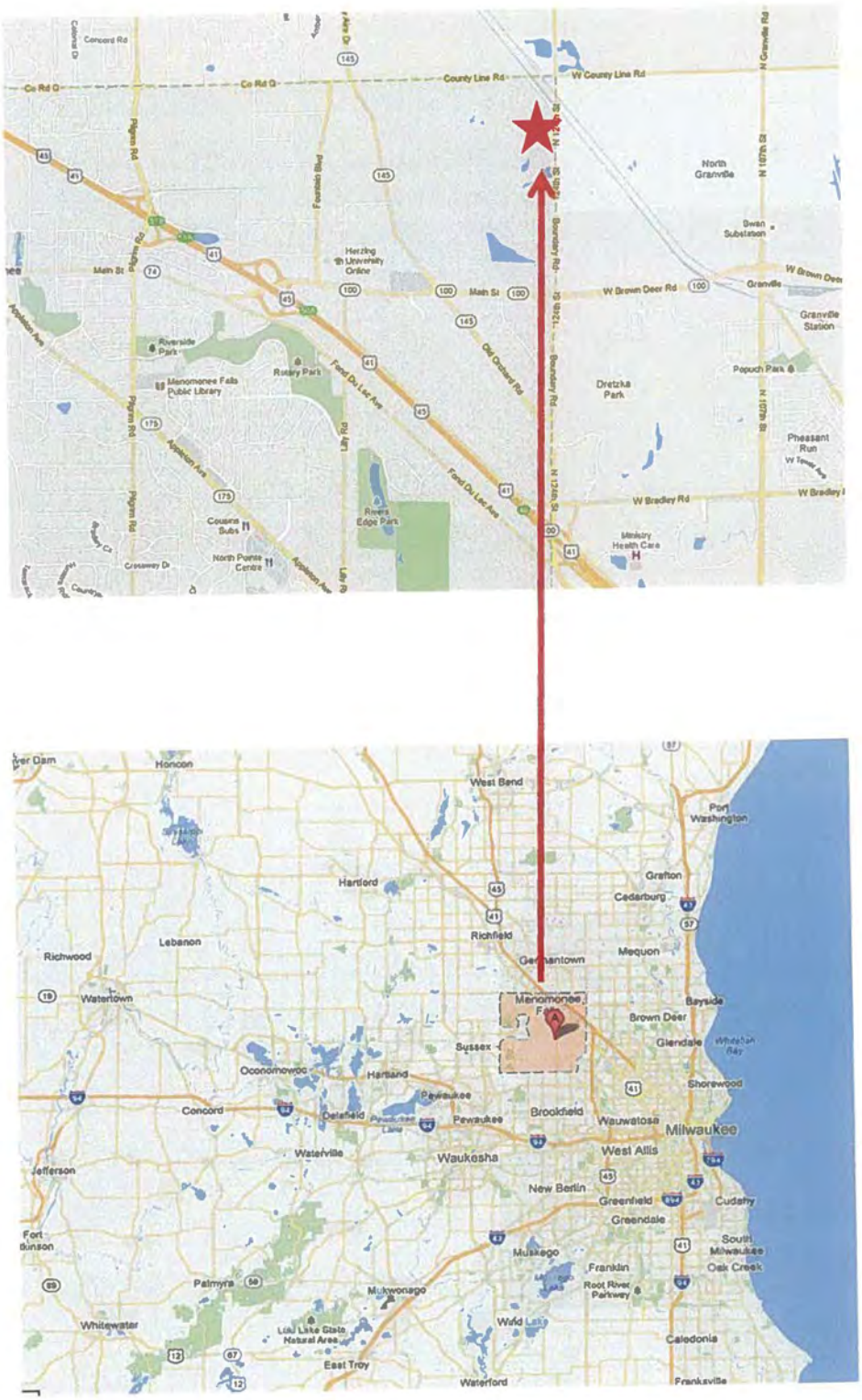
Number	Type	Description	Capability
3	Industrial type first aid kits	Includes bandages, non-prescription medicines, etc. sized for the number of personnel to be covered	On-site treatment of minor injuries
9	Eye wash and/or safety showers	Standard hard-piped eye wash/safety shower or packaged emergency eye wash/skin neutralized station	Immediate flushing of areas of body contaminated by chemicals in a spill or splashing incident
4	(SCBA) Self-Controlled Breathing Apparatus	Breathable Air (approximately 30 minutes) with positive pressure demand regulators and face pieces	Provides 30 minutes of air in the event it is necessary to enter a smoke-filled or limited oxygen environment
6	Emergency blanket	Fire blanket in a case	Aid in smothering a small fire in the laboratory
2	Protective suits	Chemical resistant suits	Protect skin and clothing from chemical splash or spill
---	Miscellaneous protective equipment	Protective coveralls, gloves, boots, hard hats, safety glasses, face shields, and respirators	Protects employees from direct contact with hazardous wastes or equipment

FIGURE 7-1

LOCATION OF FACILITY

FIGURE 7-1

LOCATION MAP



12/20/2012

FIGURE 7-2

LAYOUT OF FACILITY

Figure 7-2
Facility Site Layout

Veolia ES Technical Solutions, L.L.C
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

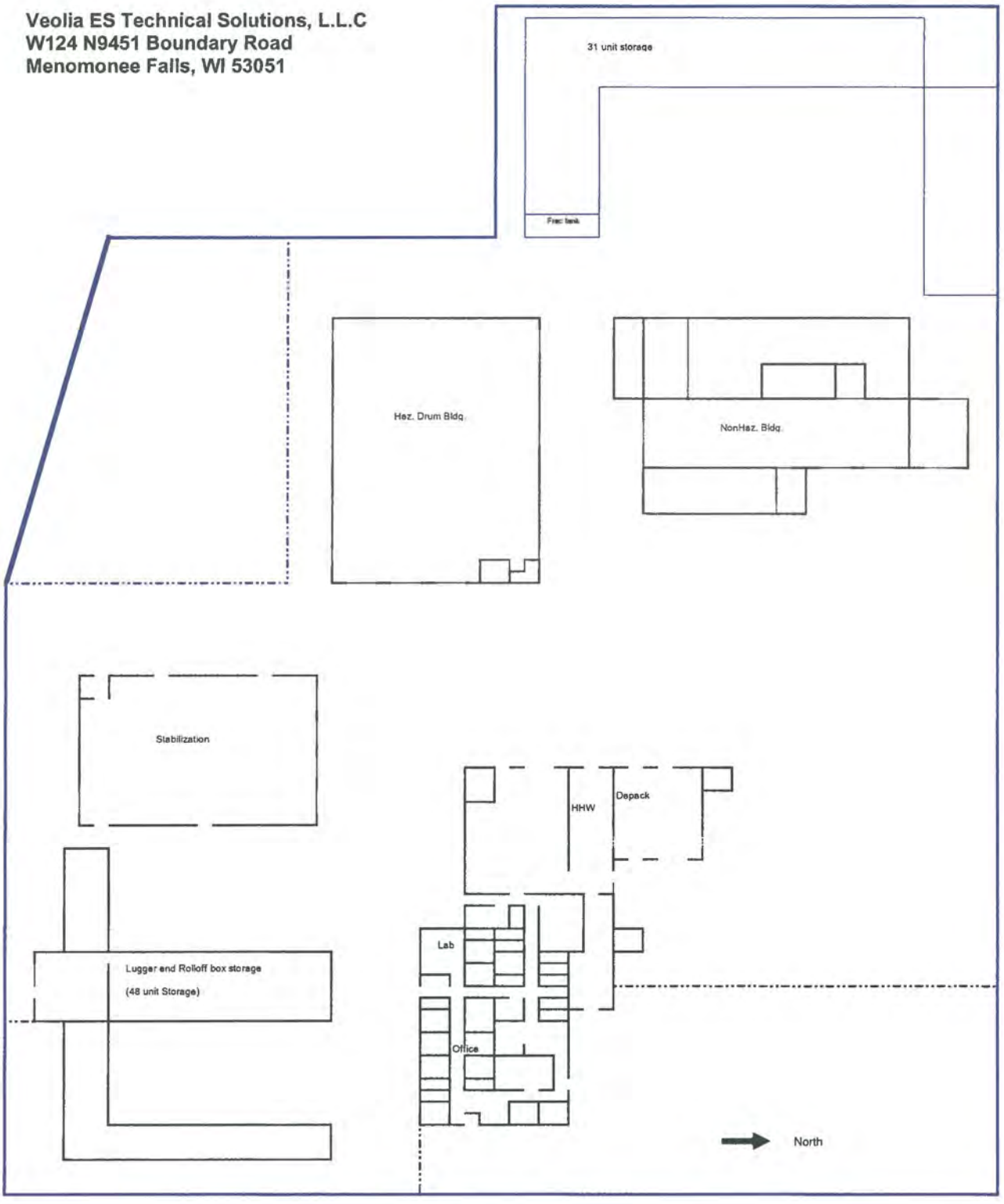
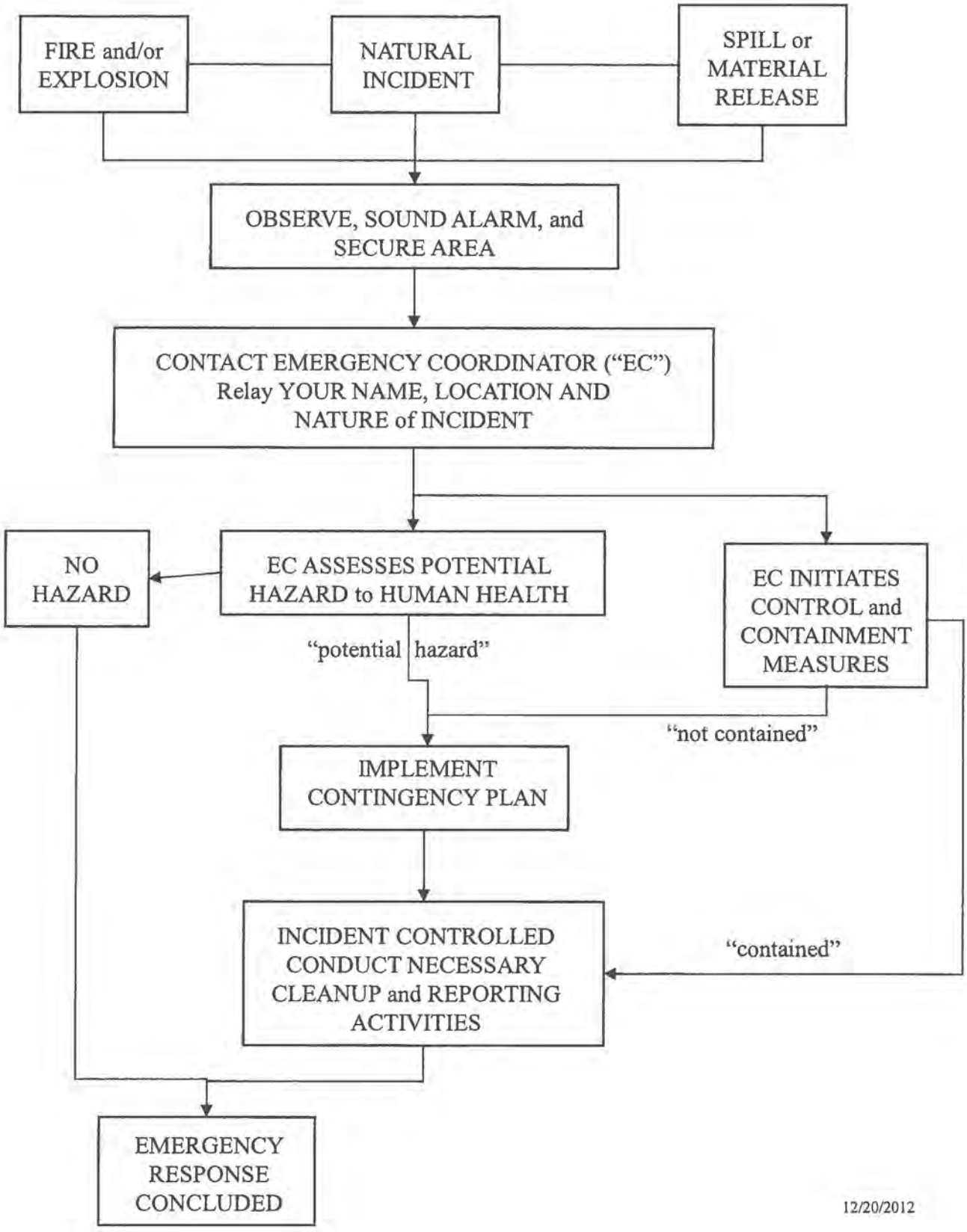


FIGURE 7-3

IMPLEMENTATION OF CONTINGENCY PLAN

FIGURE 7-3

Initial Response Activities

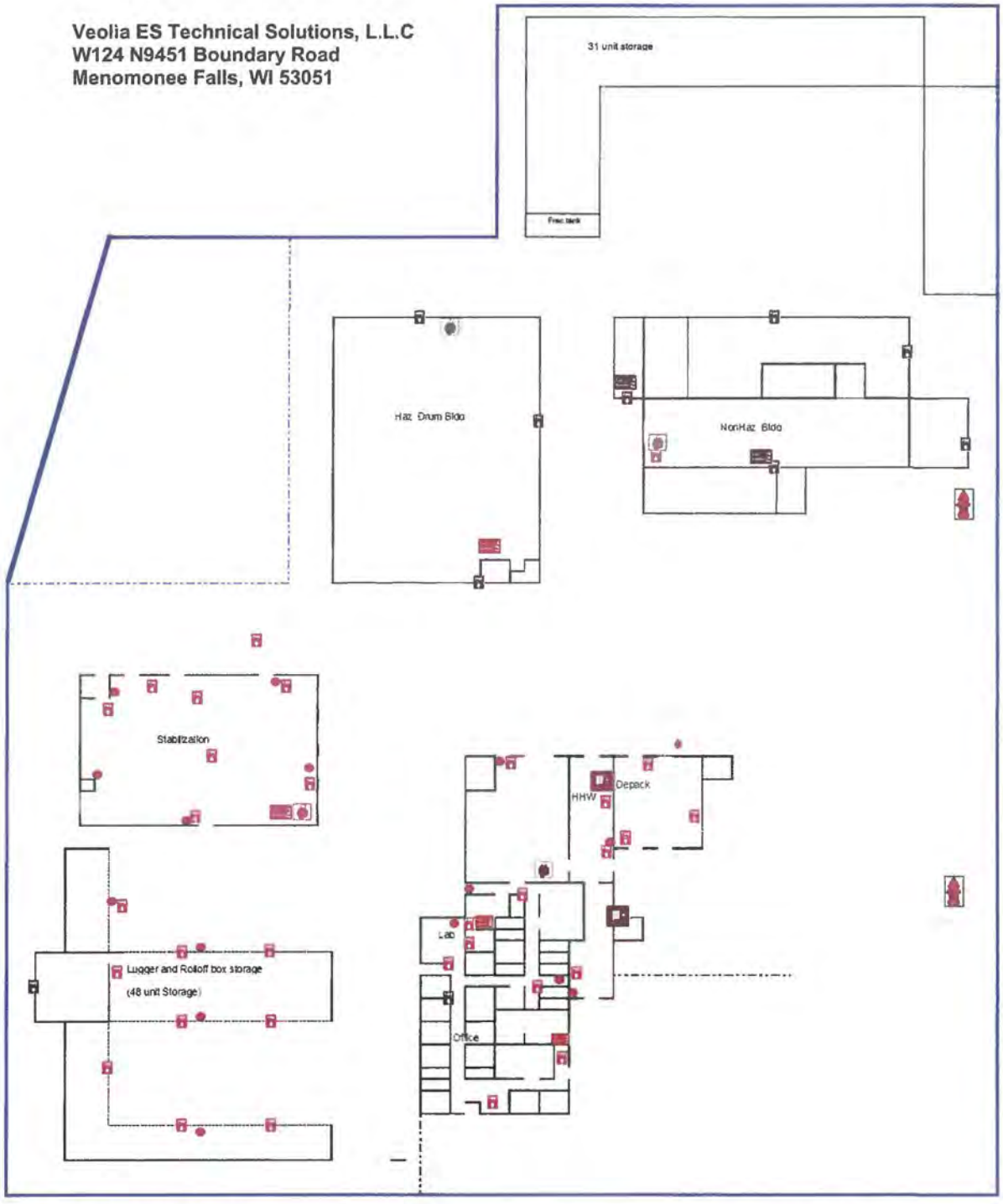


12/20/2012

FIGURE 7-4

LOCATION OF FIRE SAFETY EQUIPMENT

Figure 7-4
Facility Fire Safety Map

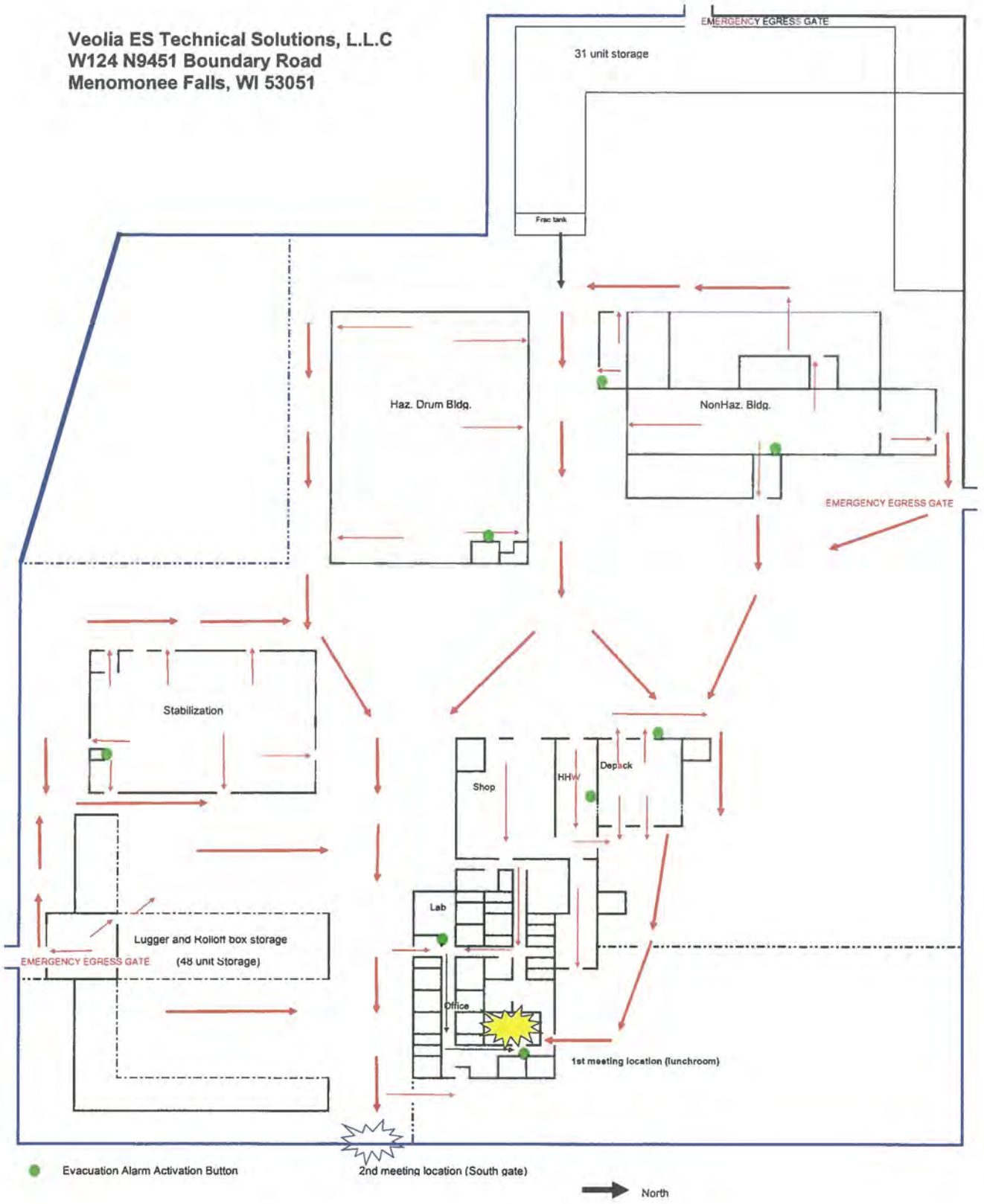


12/29/2012

FIGURE 7-5

FACILITY EVACUATION ROUTES

Figure 7-5
Facility Evacuation Routes



12/20/2012

FIGURE 7-6

FACILITY SAFETY SHOWER MAP

Figure 7-6
Facility Safety Shower Map

Veolia ES Technical Solutions, L.L.C
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

= Safety Shower

12/20/2012

FIGURE 7-7

INCIDENT INVESTIGATION FORM

VEOLIA
ENVIRONMENTAL SERVICES

Veolia ES Technical Solutions, L.L.C.

CHSP I-5-C EMPLOYEE'S FIRST REPORT OF INCIDENT FORM

CONFIDENTIAL

Employee name _____ Job title _____
Date of incident _____ Time of incident _____ a.m./p.m.
Department _____ Office location _____
Exact location of incident _____
Injury/Illness _____ Near miss _____ Vehicle/property damage _____ Fire _____
Spill RQ/Non-RQ _____ Air emission _____ Third party involvement _____ Other _____
MSD Incident _____
Time incident reported _____ a.m./p.m. Date reported _____
Weather conditions _____
Reported to _____ Title _____

Describe in detail (who, what, when why, how) incident occurred. Use separate sheet as needed. If a vehicle was involved, please use next page.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

What action was taken, if any?

_____
_____
_____
_____

Employee signature _____ Date _____

VEOLIA
ENVIRONMENTAL SERVICES

VESTS CHSP I-5-B INCIDENT INVESTIGATION REPORT
THIS MUST BE FILLED OUT WITH THE EMPLOYEE AND SUPERVISOR

INCIDENT TYPE (S)

Injury/Illness _____ Near miss _____ Vehicle/property damage _____ Fire _____
Spill RQ/Non-RQ _____ Air emission _____ Third party involvement _____ Other _____

GENERAL INFORMATION

Incident date _____ Time _____ A.m./p.m. Day of week _____
Date supervisor notified _____
Location of incident _____ County _____
Supervisor on duty _____ On scene? Yes _____ No _____
Supervisor Phone Number _____
Witness and telephone number _____

EMPLOYEE INFORMATION

Name _____ _____ Date of birth _____
Complete home address _____
County _____ Veolia employee? Yes _____ No _____
Sex: Male Female _____ _____
Home Phone: _____ Work Phone: _____
If "No", what company? _____ Job title _____
Years in current job _____ Years with company _____ Time day started _____
Employee performing normal job duties? Yes _____ No _____
On overtime? _____ Total hours for week up to the incident _____

DESCRIBE IN DETAIL WHAT HAPPENED

ATTACH SEPARATE SHEETS AS NECESSARY

WHY DID THE INCIDENT OCCUR?

USE CAUSE GUIDELINES FOR ASSISTANCE

HOW COULD THE INCIDENT BEEN PREVENTED?

INJURY/ ILLNESS INFORMATION

Extent of injury/illness

First Aid provided? Yes _____ No _____ If so, by whom?

Medical treatment provided? Yes _____ No _____ If so, by whom?

Treatment provided

Name of doctor

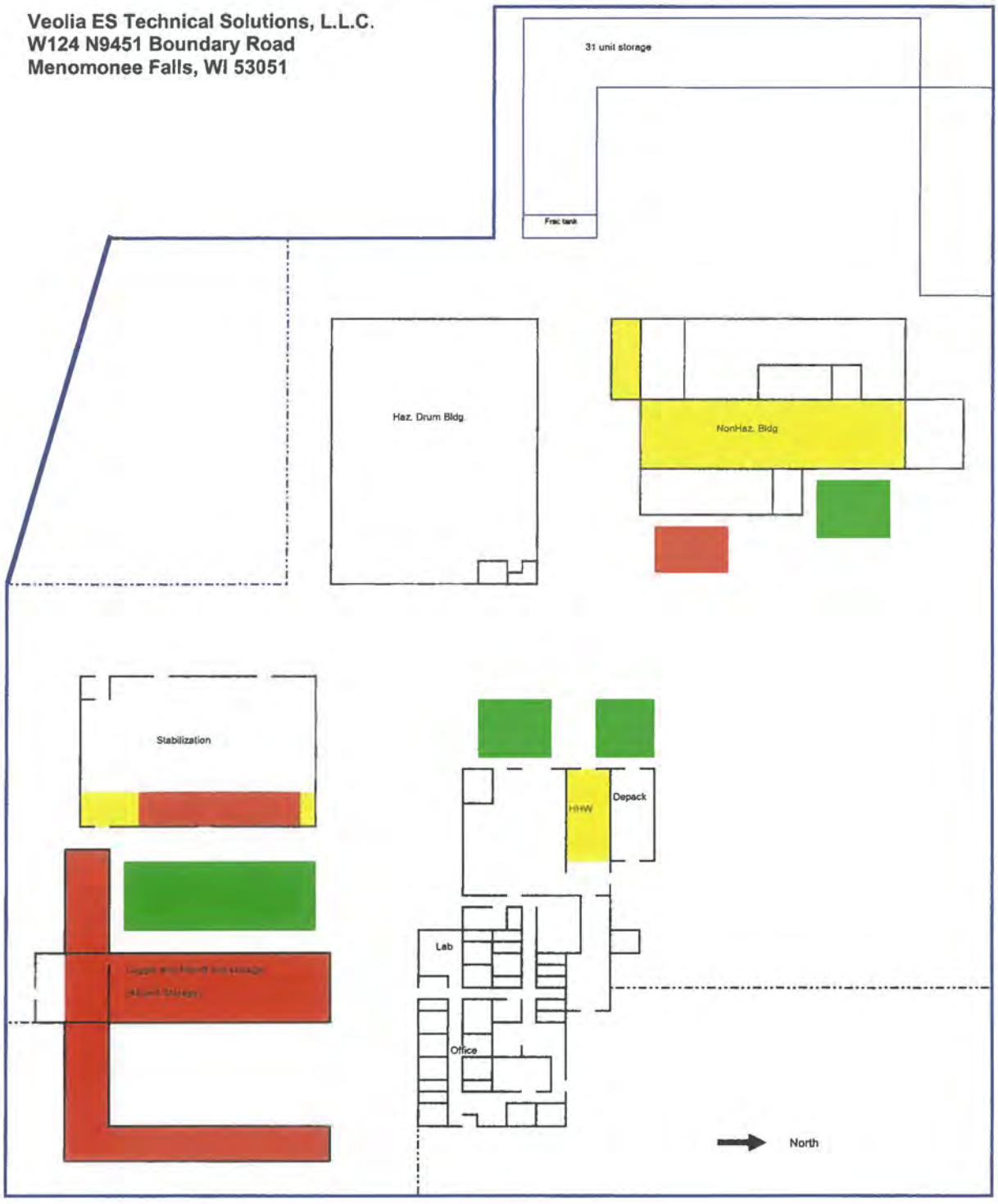
Name and address of medical provider

Attach medical provider's evaluation, if available.

FIGURE 7-8

HOUSEHOLD HAZARDOUS WASTE STORAGE LOCATIONS

Figure 7-8
HHW Storage Locations



S E C T I O N V I I I

CLOSURE PLAN

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

8.0 CLOSURE PLAN

8.1 Introduction

This document constitutes the Closure Plan as required by 40 CFR 264.112, 264.142, s. NR 670.014, 664.112, and 664.142, for the Veolia-Menomonee Falls Facility as described in this Feasibility Report and Plan of Operation.

The Veolia-Menomonee Falls Facility consists of the following RCRA regulated units:

- Container Storage Unit (1,200 Containers)
- Southeast Container Storage Unit (Roll-Offs/Drum Storage)
- Drum Repacking/Bulking/Decanting Unit
- Waste Stabilization Unit
    - Waste Storage Tank (60 cubic yards)
    - Waste Processing Tank (40 cubic yards)
    - Roll-Off/Container Storage (4 roll-offs or container equivalents)

In this document, separate closure procedures and schedules are given for each of the waste storage and treatment units. These closure procedures and schedules will be followed for partial closure of individual units or as part of final closure of the entire facility.

This plan will be amended, in accordance with 40 CFR 264.112 (b) and s. NR 670.014, 664.112, and 664.142 whenever changes in the design or operating plans of the facility cause a change in closure procedures. A request for modification will be submitted at least 60 days prior to any proposed change in the facility design or operation that affects this Closure Plan, or no later than 60 days after an unexpected event has occurred that affects the Closure Plan.

Veolia-Menomonee Falls will notify the Wisconsin Department of Natural Resources

(WDNR) and the US. Environmental Protection Agency (USEPA) of the expected final or partial closure of the expanded facility at least 180 days before such closure is expected to begin.

The facility has no land disposal operations, therefore, the facility can operate indefinitely. For purposes of satisfying NR 664.0112(2)(b) the estimated facility operation life is 30 years, however, this timeframe may be extended as long as the operations provided by the facility are warranted. All contamination will be removed during closure of the facility eliminating any possibility of the escape of hazardous waste constituents following closure, NR 664.0112(2(a).

A copy of this plan will be kept at the facility and available for inspection during the operating life of the facility.

8.1.1 Closure Policies

This plan is based on the following policies:

1. All wastes in storage (containerized and/or bulk) on-site will be shipped to a third party off-site facility for appropriate treatment and disposal.

2. All equipment associated with the Waste Stabilization Unit (tanks, conveyor belts, bins, grinder, pumps, valves, associated piping, and inside Southeast Container storage unit) will be cleaned, decontaminated, and dismantled and held or transferred to another facility for beneficial use.

3. All equipment associated with the Repack/Bulking/Decanting Unit will be cleaned, decontaminated and held or transferred to another facility for beneficial use.

4. All buildings and structures will be cleaned, decontaminated, and left in place.

5. All mobile and fixed equipment that has been used to process or handle wastes will be cleaned, decontaminated, and held or transferred to another facility for beneficial use.

6. The asphalt paved roads and parking areas will be brushed and swept and left in place.

7. The facility fencing and gates will be left in place.

8. Stormwater entering any secondary containment area during closure activities will be collected and disposed at an off-site POTW or appropriately permitted TSDF facility.

9. Unpaved areas which border the regulated unit(s) will be sampled and analyzed to determine if contamination is present. As necessary, contaminated soils will be shipped to an appropriate off-site permitted TSDF facility.

8.1.2 Decontamination Procedures

All concrete floors and structures, sumps and secondary containment systems will be emptied of any stormwater, swept to remove any solid residues or debris, and visually inspected for evidence of spills. Veolia believes that there will be minimal evidence of spills or contamination due to Veolia policy and WDNR Regulations that require all spills to be immediately remediated. If evidence of contamination does exist, the contaminated concrete will be either decontaminated or removed. If removed, the contaminated concrete will be containerized and shipped off-site for disposal in accordance with all applicable regulations. If visual contamination is not evident, the concrete will be pressure washed utilizing water at ambient temperature and a minimum 3,000 psi of water pressure. The wash water will be collected,

sampled, analyzed, and disposed in accordance with all applicable regulations. If the analysis indicates no contaminants, the decontamination of the concrete will be considered complete. The pressure wash process will be repeated until no contamination exists in the wash water.

All mixers, tanks, conveyor belts, bins, grinders, back hoes, pumps, valves, piping, and other equipment that have held or treated waste will be emptied of wastes and waste residues. Methods that will be utilized to ensure wastes are removed from equipment will include, but not be limited to; dumping, pumping, scraping, scrubbing, until all visible waste has been removed from the equipment. The equipment will then be pressure washed utilizing water at ambient temperature and a minimum 3,000 psi of water pressure. The wash water will be collected, sampled, analyzed, and disposed in accordance with all applicable regulations. If the analysis indicates no contaminants, the decontamination of the equipment will be considered complete. The pressure wash process will be repeated until no contamination exists in the wash water.

The exterior of all mobile equipment will also be washed with high-pressure water utilizing water at ambient temperature and a minimum 3,000 psi of water pressure. The wash water will be collected, sampled, analyzed, and disposed in accordance with all applicable regulations.

Pressure washing has been selected as the decontamination method for several reasons. First, as discussed above all spills and releases at the Veolia facility are cleaned up as soon as they are identified. Second, the secondary containment areas in the container storage unit and the drum repacking/bulking/decant unit are coated to minimize the possibility that the concrete secondary containment will be contaminated. The wastes stored and processed in the stabilization building and the southeast container storage are predominantly wastes that are hazardous due to the presence of heavy metals. Using a high pressure wash is the best method

to remove any potential metals from the secondary containment or equipment in these units. Third, the equipment used in the operations on-site are constructed of steel, therefore, the high pressure water will be the best alternative for decontamination of this equipment.

The wash waters will be collected and analyzed after each high pressure cleaning. All secondary containment structures and equipment will be considered to be decontaminated, clean closed, and meeting closure standards if the laboratory analysis of the wash waters shows hazardous constituents are not present above TCLP levels (as defined in 40 CFR 261), and the pH is greater than 2 and less than 12.5, and the respective concentration of TOC and TOX do not exceed 100 ppm each.

8.1.3 Soil Sampling

Surface soil samples will be collected from potentially contaminated unpaved areas of the facility which may border regulated units, such as the Stabilization Unit. Soil evaluation will be based upon a 100' x 100' (or equivalent), grid pattern. Five one quart soil samples will be individually collected from five separate surface locations of each grid segment. Each individual sample will be thoroughly mixed and retained. All sample collection and compositing activities will use clean equipment.

A one quart composite sample will be prepared to represent the grid segment, by taking an equal volume of soil from each of the five individual samples. This composite sample will be analyzed to determine if the unpaved grid area has been contaminated. Each sample will be recorded, preserved, and packaged for analysis following appropriate handling and chain-of custody procedures as identified by U.S. EPA and Wisconsin DNR**.** Each composite sample will be analyzed at a minimum for TCLP Parameters. Soils will be considered uncontaminated if they do

not exhibit the characteristics of a hazardous waste as defined in 40 CFR 261 subpart C. If the analysis shows contamination above acceptable levels, as specified above, the top six inches in the area of concern will be excavated, and the soil underneath resampled and analyzed as described earlier. The procedure will be continued until all contaminated soil has been removed. Contaminated soil (if present) will be properly treated/disposed of at an appropriate off-site permitted facility.

8.1.4 Basis for Estimates

This Closure Plan presents a "worst-case" scenario by assuming that the facility will contain a volume of wastes equal to the maximum capacity of the storage and treatment units. This is a "worst-case" assumption since final closure will probably be anticipated and final operations will be scheduled **to** produce less than a maximum inventory of waste when operations terminate. Listed in Table 8-1 is a maximum inventory list of each unit which is based on a "worst-case" scenario.

The following information provides the basis for closure cost calculations:

- Transportation Costs

  $2.00 per running mile

  $397.00 minimum

- Volume of Waste in Containers

  Each drum or smaller container will be able to hold 55 gallons of wastes. Although the facility will receive containers of varying capacities, the majority are expected to be 55 gallon drums. Roll-Off/Lugger Box containers are assumed to hold 4,039 gallons of waste.

• Description, Distance and Cost of Third-Party Off-Site treatment, Incineration or Disposal Facilities

For RCRA Treatment and Recovery of organic waste,

Brenntag
N59 W14765 Bobolink Ave.
Menomonee Falls, WI 53051

Price - $70.00 per container
Distance - 10 miles

Essroc Cement Company
State Road 25 South
Logansport, IN 46947

Price - $0.08 per gallon
Distance - 246 miles

For RCRA treatment of wash water, rinsate and precipitation,

EQ-Illinois Corporation
16435 S. Center Ave.
Harvey, IL 60426

Price - $0.35 per gallon
Distance - 136 miles

For RCRA incineration,

Clean Harbors Deer Park
2027 Battleground Rd
Deer Park, TX 77536

Price -$2.40 per bulk gallon $600.00 per container
Distance -1091 miles

For RCRA treatment and/or disposal of inorganic waste,

Environmental Quality Corp.
1923 Frederick Street
Detroit, MI 48211

Price - $65.00 per drum for treatment and disposal
$98.00 per cubic yard for treatment and disposal
Distance - 372 miles

- Weight of Non-Recoverable Organic Wastes

It is assumed that non-recoverable organic waste will weigh ten pounds per gallon on the average.

- Weight of Solid Wastes in Roll-Off/Lugger Boxes

It is assumed that the contents of Roll-Off/Lugger Boxes are a moist inorganic sludge weighing nine pounds per gallon.

- Cleaning of Building and Tanks

It is assumed that cleaning of building floors, walls and roofs will use three rinses of high-pressure water at a rate of 0.5 gallons per square foot per rinse. For tanks it is assumed that an amount of rinse water equal to 20 percent of the volume of the tank will be used to triple rinse tanks *as* well as associated pipes, pumps, valves, and other related equipment.

- Volume of Unprocessed Waste Received on Site.

The full volume of the Waste Stabilization Unit receiving bin (40 cubic yards), will be considered as full of unprocessed waste.

- Reagent Storage

The full volume of the reagent storage silo (60 cubic yards), will be considered as full of reagent.

- Soils

  The perimeter of the Waste Stabilization Unit is estimated to be approximately 500 linear feet. For purposes of this Closure Plan it is assumed that a 5 foot wide border of unpaved area, 6 inches deep will be excavated for off-site disposal. This equates to a volume of approximately 50 cubic yards.

- Cleaning of Control Building, Exposed Foundations, Process Equipment and Tanks

  The Control Building Exterior walls, roof and exposed concrete foundations, floors and sumps will be cleaned using water at ambient temperature and a minimum 3,000 psi of water pressure at a rate of approximately 0.5 gallons per square foot per rinse. For mixers, grinders, tanks, associated pipes, pumps, valves, and other related equipment it is assumed that an amount of rinse water, equal to approximately 20 percent of the estimated equipment volume will be used to triple rinse the equipment.

- Stormwater

  Collection of a total of 25,000 gallons of storm water is provided during closure activities.

- The facility laboratory will be thoroughly cleaned. Equipment, glassware, and non-waste chemicals will be salvaged and sold. All waste samples and waste laboratory chemicals will be put in lab packs and shipped to an off-site facility for incineration.

- All mobile equipment that has handled wastes will be cleaned and decontaminated by washing in the unloading station of the stabilization unit. The rinse water will be collected for off-site treatment and disposal.

- Direct precipitation that falls into secondary containment systems and the unloading station before they are cleaned and decontaminated will be collected for off-site treatment and disposal.

- The paved area of the facility will be brushed and swept after all of the regulated units in this area are closed. Swept-up material will be put into containers and shipped off-site for disposal.

- Closure of all units will be inspected by a registered professional engineer who will certify to the adequacy of closure. It is assumed that the inspecting engineer will visit the facility during the entire closure period.

8.1.5 Storm water

Any storm water entering into any secondary containment system during closure activities will be collected and transferred into tank truck(s). If the storm water was collected prior to decontamination tasks, the storm water will be sampled and analyzed for TCLP parameters, pH, TOC and TOX. Storm water will be considered as uncontaminated if hazardous constituents are not present above TCLP levels (as defined in 40 CFR 261), and the pH is greater than 2 and less than 12.5, and the respective concentration of TOC and TOX do not exceed 100 ppm each. Collected storm water will be transported to an appropriate permitted TSD facility for final treatment and disposal.

8.1.6 Schedule

Table 8-2 lists the estimated times to perform the closure tasks. These tasks will be performed concurrently with the closing of the regulated units described in the previous sections and may be performed concurrently with each other. Collection of rainwater and inspection of closure will last throughout the closure process. The total time required for these closure tasks is 60 days, the same as for final closure of the facility.

8.1.7 Inspection

All closure activities will be monitored by an independent registered professional engineer. Certification of closure of the hazardous waste units will be submitted to WDNR within 60 days of completion of the final closure as detailed in this plan.

8.2 Closure Cost Estimates

This Closure Cost Estimate provides a cost estimate to complete final closure of the facility. Closure Cost Estimates are provided for individual hazardous waste management units. These costs are then aggregated into a total facility closure cost estimate. All estimates are based upon the costs for a third party to perform individual tasks.

The Closure Cost Estimate will be adjusted for inflation annually in accordance with the requirements of 40 CFR 264.142(b) and s. NR 664.142(2).

The Closure Cost Estimate shall be reviewed whenever a change in the Closure Plan increases the cost of closure. Any revised estimate shall also be adjusted annually for inflation as stipulated above. Copies of the original or revised Closure Cost Estimate and the latest inflation-adjusted estimate shall be kept at the facility during the facility's operating life.

8.2.1 Container Storage Unit

The costs of closing the Container Storage Unit are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
1. Load and transfer 300 full containers to off-site incinerator					
Labor	$38.00	Per Hour	40	$1,520.00	
Transportation	$4,364.00	Per Round Trip	3	$13,092.00	
Subtotal					$14,612.00
2. Load and transfer 600 full containers to off-site treatment/disposal facility					
Labor	$38.00	Per Hour	80	$3,040.00	
Transportation	$397.00	Per Round Trip	5	$1,985.00	
Subtotal					$5,025.00
3. Load and transfer 300 full containers to off-site inorganic treatment/disposal facility					
Labor	$38.00	Per Hour	40	$1,520.00	
Transportation	$1,488.00	Per Round Trip	3	$4,464.00	
Subtotal					$5,984.00
4. Incinerate 300 containers at off-site incinerator					
Incineration	$600.00	Per Container	300	$180,000.00	
Subtotal					$180,000.00
5. 600 containers at off-site organic treatment					
Treatment / Disposal	$70.00	Per Container	600	$42,000.00	
Subtotal					$42,000.00
6. 300 containers at off-site inorganic treatment & disposal					
Treatment / Disposal	$65.00	Per Container	300	$19,500.00	
Subtotal					$19,500.00
7. Decontaminate Unit					
Labor	$38.00	Per Hour	80	$3,040.00	
Equipment Rental	$300.00	Per Week	1	$300.00	
Subtotal					$3,340.00
8. Transport rinse water for off-site treatment and disposal					
Transportation	$544.00	Per Round Trip	6	$3,264.00	
Subtotal					$3,264.00
9. Treat and dispose of rinse water					
Treatment / Disposal	$0.35	Per Gallon	27,000	$9,450.00	
Subtotal					$9,450
TOTAL COST FOR CONTAINER STORAGE UNIT CLOSURE					$283,175.00

8.2.2 Drum Repack/Bulking/Decant Unit

The costs for closing the Drum Repack/Bulking/Decant Unit are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
1. Load and transfer 20 full containers to organic					
Labor	$38.00	Per Hour	2	$76.00	
Transportation	$397.00	Per Round Trip	1	$397.00	
Subtotal					$473.00
2. 20 containers to off-site organic treatment					
Treatment	$70.00	Per Container	20	$1,400.00	
Subtotal					$1,400.00_
3. Transportation and incineration of 5,000 gallon semi-tanker					
Transportation	$4,364.00	Per Round Trip	3	$13,092.00	
Incineration	$2.40	Per Gallon	18,000	$43,200.00	
Subtotal					$56,292
4. Transportation and Disposal of 3,000 pounds of carbon filter media					
Transportation per Cubic Yard	$50.00	Per Cu. Yd.	5	$250.00	
Disposal of Carbon	$0.50	Per Pound	3,000	$1,500.00	
Subtotal					$1,750.00
5. Clean and decontaminate building and equipment					
Labor	$38.00	Per Hour	80	$3,040.00	
Equipment Rental	$300.00	Per Week	1	$300.00	
Subtotal					$3,340.00
6. Transport rinsewater off-site for incineration					
Transportation	$4,364.00	Per Round Trip	1	$4,364.00	
Subtotal					$4,364.00
7. Incinerate 1,000 gallons of rinsewater					
Incineration	$2.40	Per Gallon	1,000	$2,400.00	
Subtotal					$2,400.00
TOTAL COST FOR DRUM DECANT UNIT CLOSURE					$70,019.00

8.2.3 Southeast Container Storage Unit

The costs for closure of Southeast Container Storage Unit are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
1. Load and transfer 48 containers to off-site landfill					
Transportation	$1,488.00	Per Round Trip	48	$71,424.00	
Subtotal					$71,424.00
2. Dispose of the contents of 24 containers					
Disposal	$98.00	Per Cubic Yard	480	$47,040.00	
Subtotal					$47,040.00
3. Treatment and disposal of the contents of 24 containers					
Treatment / Disposal	$98.00	Per Cubic Yard	480	$47,040.00	
Subtotal					$47,040.00
4. Decontaminate unit					
Labor	$38.00	Per Hour	80	$3,040.00	
Equipment Rental	$300.00	Per Week	1	$300.00	
Subtotal					$3,340.00
5. Transport rinse water for off-site treatment and disposal					
Transportation	$544.00	Per Round Trip	8	$4,352.00	
Subtotal					$4,352.00
6. Treat and dispose of Rinse water					
Treatment / Disposal	$0.35	Per Gallon	24,000	$8,400.00	
Subtotal					$8,400.00
TOTAL COST SOUTHEAST CONTAINER STORAGE UNIT CLOSURE					$181,596.00

8.2.4 Waste Stabilization Unit including Container Storage and two RCRA Tanks

The costs for closing the Stabilization Unit are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
1. Soil (50 cu. yd.) in bordering unpaved are					
Labor	$38.00	Per Hour	8	$304.00	
Analysis (TCLP)	$738.00	Per Sample	15	$11,070.00	
Transportation	$1,488.00	Per Round Trip	3	$4,464.00	
Treatment / Disposal	$98.00	Per Cubic Yard	50	$4,900.00	
Subtotal					$20,738.00
2. Storage Tank (60 cu. Yd.) of non-processed hazardous waste					
Labor	$38.00	Per Hour	24	$912.00	
Transportation	$1,488.00	Per Round Trip	3	$4,464.00	
Treatment/Disposal	$98.00	Per Cubic Yard	60	$5,880.00	
Subtotal					$11,256.00
3. Receiving Bin (40 cu. Yd.) of non-processed waste					
Labor	$38.00	Per Hour	16	$608.00	
Transportation	$1,488.00	Per Round Trip	2	$2,976.00	
Treatment / Disposal	$98.00	Per Cubic Yard	40	$3,920.00	
Subtotal					$7,504.00
4. Non-processed waste received on-site (15 roll-off boxes @ 20 cu. yd. each)					
Transportation	$1,488.00	Per Round Trip	15	$22,320.00	
Disposal	$98.00	Per Cubic Yard	300	$29,400.00	
Subtotal					$51,720.00
5. Processed waste on-site (30 roll-off boxes @ 20 cu. yd. each)					
Transportation	$1,488.00	Per Round Trip	30	$44,640.00	
Treatment / Disposal	$98.00	Per Cubic Yard	600	$58,800.00	
Subtotal					$103,440.00
6. Unused Reagent (60 cu. yd.)					
Labor	$38.00	Per Hour	24	$912.00	
Transportation	$397.00	Per Round Trip	3	$1,191.00	
Disposal	$35.00	Per Cubic Yard	60	$2,100.00	
Subtotal					$4,203.00
7. Personal protective equipment and sweepings					
Labor	$38.00	Per Hour	8	$304.00	
Transportation	$1,488.00	Per Round Trip	1	$1,488.00	
Treatment / Disposal	$98.00	Per ton	20	$1,960.00	
Subtotal					$3,752.00
8. Waste stabilization and storage building					
Labor	$38.00	Per Hour	80	$3,040.00	
Analysis (TCLP, TOC,	$738.00	Per Sample	2	$1,476.00	
Transportation	$544.00	Per Round Trip	1	$544.00	

Treatment / Disposal	$0.35	Per Gallon	5,000	$1,750.00	
Equipment Rental	$300.00	Per Week	1	$300.00	
Subtotal					$7,110.00

8.2.4 Waste Stabilization Unit including Container Storage and Two RCRA Tanks (Continued)

The costs for closing the Stabilization Unit are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
9. Stormwater (5,000 gallons)					
Labor	$38.00	Per Hour	8	$304.00	
Analysis (TCLP, TOC, TOX, pH)	$738.00	Per Sample	1	$738.00	
Transportation	$544.00	Per Round Trip	1	$544.00	
Treatment / Disposal	$0.35	Per Gallon	5,000	$1,750.00	
Subtotal					$3,336.00
11. Dismantle waste stabilization and storage building					
Labor	$38.00	Per Hour	160	$6,080.00	
Equipment Rental	$750.00	Per Week	1	$750.00	
Equipment Delivery	$200.00	Lump Sum	1	$200.00	
Subtotal					$7,030.00
TOTAL COST FOR WASTE STABILIZATION AND STORAGE BUILDING					$220,089.00

8.2.5 Other Closure Activities

The Costs for closure of the remainder of facility are estimated as follows:

ITEM	UNIT COST	UNIT	NO. OF UNITS	TOTAL COST	TOTALS
1. Laboratory and equipment decontamination (NOTE: Transportation costs for labpacks included in Container Storage Unit)					
Labor	$38.00	Per Hour	56	$2,128.00	
Incineration	$600.00	Per Labpack	10	$6,000.00	
Transportation (rinsewater)	$544.00	Per Round Trip	1	$544.00	
Treatment / Disposal (rinsewater)	$0.35	Per Gallon	1,000	$350.00	
Subtotal					$9,022.00
2. Cleaning of paved roads					
Labor	$38.00	Per Hour	16	$608.00	
Treatment / Disposal	$98.00	Per Cubic Yard	20	$1,960.00	
Transportation	$1,488.00	Per Round Trip	1	$1,488.00	
Subtotal					$4,056.00
3. Sampling and Analysis					
Liquid Analysis (TCLP, TOC, TOX, pH)	$738.00	Per Sample	22	$16,236.00	
Soil Analysis (TCLP)	$738.00	Per Sample	4	$2,952.00	
Subtotal					$19,188.00
TOTAL COST FOR OTHER CLOSURE ACTIVITIES					$32,266.00

8.2.5.1 Basis for Number of Liquid Analysis

Under 8.2.5, Other Closure Activities, the sampling and analysis for closure was determined to be 19 samples. The basis for this determination centered around the following:

Liquid Analysis (TCLP, pH, TOC, TOX)

– Container Storage Rinsewater	6 analysis
– Repack/Bulking/Decant Rinsewater	3 analysis
– Waste Stabilization Unit	3 analysis
– Laboratory Rinsewater	1 analysis
– Rainwater	4 analysis
– Southeast Container Storage Unit	5 analysis
	22 total

8.2.6 Total Facility Closure Costs

The total closure costs for the fully expanded Veolia-Menomonee Falls facility are shown in Table 8-3. As these are the worst-case costs for the facility this estimate serves as both a planned-closure and unplanned-closure cost estimate.

8.3 Overall Closure Schedule -- Planned Closure

8.3.1 Overall Schedule

Table 8-4 displays the overall schedule for completing final closure of the facility. This schedule is based on the closure schedules for all individual regulated units presented in the proceeding sections. For logistical reasons relating to the amount of heavy equipment that can

be safely operated in the relatively small active area of the site where the regulated units are located, the closure of the individual units will mostly be performed sequentially. Nevertheless, where possible, closure of the individual units will be performed concurrently.

Table 8-4 shows that all wastes will be removed from inventory and shipped for off-site treatment and disposal, and that all waste storage and treatment units will be finally closed within 60 work days after last waste receipt.

8.3.2 Overall Schedule-Unplanned Closure

Should the Veolia-Menomonee Falls facility be forced to initiate unplanned closure, the procedures and schedule followed will be the same as described for planned closure.

8.4 Financial Assurance for Closure

A financial assurance statement for closure of the facility is located in Appendix I.

8.5 Liability Insurance Documents

Veolia-Menomonee Falls' Certificate of Pollution Liability Insurance can be found in Appendix G.

TABLE 8-1

MAXIMUM WASTE INVENTORY AT THE TIME OF CLOSURE

CONTAINER STORAGE UNIT

	Quantity
Containers of non-recoverable organic wastes to be shipped off-site for incineration.	300 Containers
Containers of recoverable organic, non-reactive inorganic, and reactive wastes to be shipped off-site for decanting/treatment, reclamation, and/or disposal.	900 Containers
Quantity of decontamination rinsewater to be collected and shipped off-site for treatment and disposal (17,500 sq. ft. x 1.5 gals/sq. ft.).	27,000 Gallons

DRUM REPACK/BULKING/DECANT UNIT

	Quantity
Containers of recoverable organic wastes to be shipped off-site for treatment.	20 Containers
Gallons of waste in semi-tanker to be shipped off-site for treatment.	5,000 Gallons
Quantity of rinsewater from decontamination of the building and equipment to be collected and shipped off-site for incineration (627 sq. ft. x 1.5 gal/sq. ft.)	1,000 Gallons

SOUTHEAST CONTAINER STORAGE UNIT

Item	Quantity
Containers to be shipped for off-site disposal	48 containers
Quantity of decontamination rinsewater to be collected for off-site treatment and disposal (4,000 + 16,380 sq. ft x 1.5 gals/sq. ft)	24,570 gallons

MAXIMUM WASTE INVENTORY AT THE TIME OF CLOSURE
TABLE 8-1 (Continued)

WASTE STABILIZATION AND CONTAINER BUILDING

	Item	Quantity
1	Solid hazardous waste received on-site, which will be transported for off-site treatment and disposal	300 cu. yd.
	Assume 15 Roll-Off Boxes @ 20 cu. yd. (may be less than 15)	60 cu. yd.
	Solid Waste Storage Tank	40 cu. yd.
	Steel Bin	400 cu. yd
2	Solid hazardous waste, stabilized at VES-MF, which will be transported for off-site permitted disposal	.
	Assume 30 Roll-Off Boxes @ 20 cu. yd. (may be less than 30)	600 cu. yd.
3	Unused Stabilization Reagent, which will be transported for off-site permitted disposal	60 cu. yd.
	Reagent Storage Silo	
4	Contaminated Soil which will be transported for off-site permitted disposal, if required	30 cu. yd.
	500 lf x 5 lf x 0.5 ft deep	
5	Solid residues, debris, sweepings and discarded PPE (maximum)20 cu. yd.	20 cu. yd.
6	Decontamination Solution which will be transported for off-site permitted treatment and disposal	5,000 gal.
7	Stormwater which will be transported for off-site treatment and disposal	5,000 gal.

OTHER CLOSURE ACTIVITIES

Item	Quantity
Number of lab packs to be incinerate from cleaning of laboratory	10 containers
Quantity of rinsewater from the washing of equipment and the laboratory	1,000 gallons
Estimated quantity of direct precipitation from unroofed containment systems and unloading stations	20,000 gallons
Quantity of paved-area sweepings to be shipped to an off-site landfill	20 cubic yards

TABLE 8-2

ESTIMATED TIMES TO COMPLETE CLOSURE
OF THE FOLLOWING UNITS:

CONTAINER STORAGE UNIT

Task	Time (days)
Assemble personnel and equipment and verify inventory for closure	5
Remove and ship 1200 containers to off-site treatment/disposal	12
Clean and decontaminate Drum Storage Unit	5
Maximum Time	22

REPACK BULKING DECANT UNIT

Task	Time (days)
Remove and ship 20 55-gallon containers. three 6,000 gallon semi-tanker, and dean and decontaminate the building and equipment	5
Maximum Time	5

SOUTHEAST CONTAINER STORAGE UNIT

Task	Time (days)
Remove and ship 48 full containers for off-site disposal	20
Clean and decontaminate Roll-Off/Lugger Box Storage Units	5
Maximum Time	25

Table 8-2 (Continued)
WASTE STABILIZATION AND STORAGE BUILDING

	Task	Time (days)
1	Assemble Closure Team including independent P.E.	2.0 days
2	Sample soils in unpaved area. (Analytical results will be required in 14 days).	0.5 days
3	Transfer non-processed hazardous waste from waste storage tank (silo) into transportation vehicles and transport directly to off-site	1.0 days
4	Transfer unused reagent from storage silo into transportation vehicles and transport directly to non-hazardous disposal facility.	1.0 days
5	Transfer non-processed hazardous waste from receiving bin into transportation vehicles and transport directly to off-site treatment	1.0 days
6	Transport non-processed hazardous waste, received on-site, for off-site treatment and permitted disposal.	10.0 days
7	Transport processed hazardous waste, staged on-site, for off-site permitted disposal.	5.0 days
8	Empty process equipment of residual waste and place into transport vehicle; sweep waste Stabilization Unit area and place all	1.0 days
9	Excavate and transport contaminated soil for off-site permitted treatment and disposal (if required)	1.0 days
10	Decontaminate process equipment	3.0 days
11	Decontaminate Building	15 days
12	Sample collected rinse *water* (Analytical results will be required in 14 days)	0.5 days
13	Sample any collected stormwater (Analytical results will be required in 14 days)	0.5 days
14	Receive final laboratory analytical reports. Confirm **final** decontamination status of all Waste Stabilization Unit equipment.	5.0 days
15	Dismantle all decontaminated Waste Stabilization Unit equipment.	4.0 days
16	Transport collected decontamination water and stormwater for off-site treatment.	1.0 days
17	Independent P.E. certifies closure activities arc in conformance with this closure plan	1.0 days
18	WDNR closure inspection	2.0 days
	Maximum Time	54.5 days

OTHER CLOSURE ACTIVITIES

Task	Time (days)
Clean laboratory; pack chemicals and waste samples in lab packs	3
Wash mobile equipment and laboratory	3
Collect direct precipitation from unroofed containment areas and unloading areas for off-site disposal	56
Sweep paved area of facility	3
Load and transport lab packs and containers of swept-up material to off-site disposal	6
Sampling and analysis	14
Inspect closure	60
Maximum Time	60

TABLE 8-3

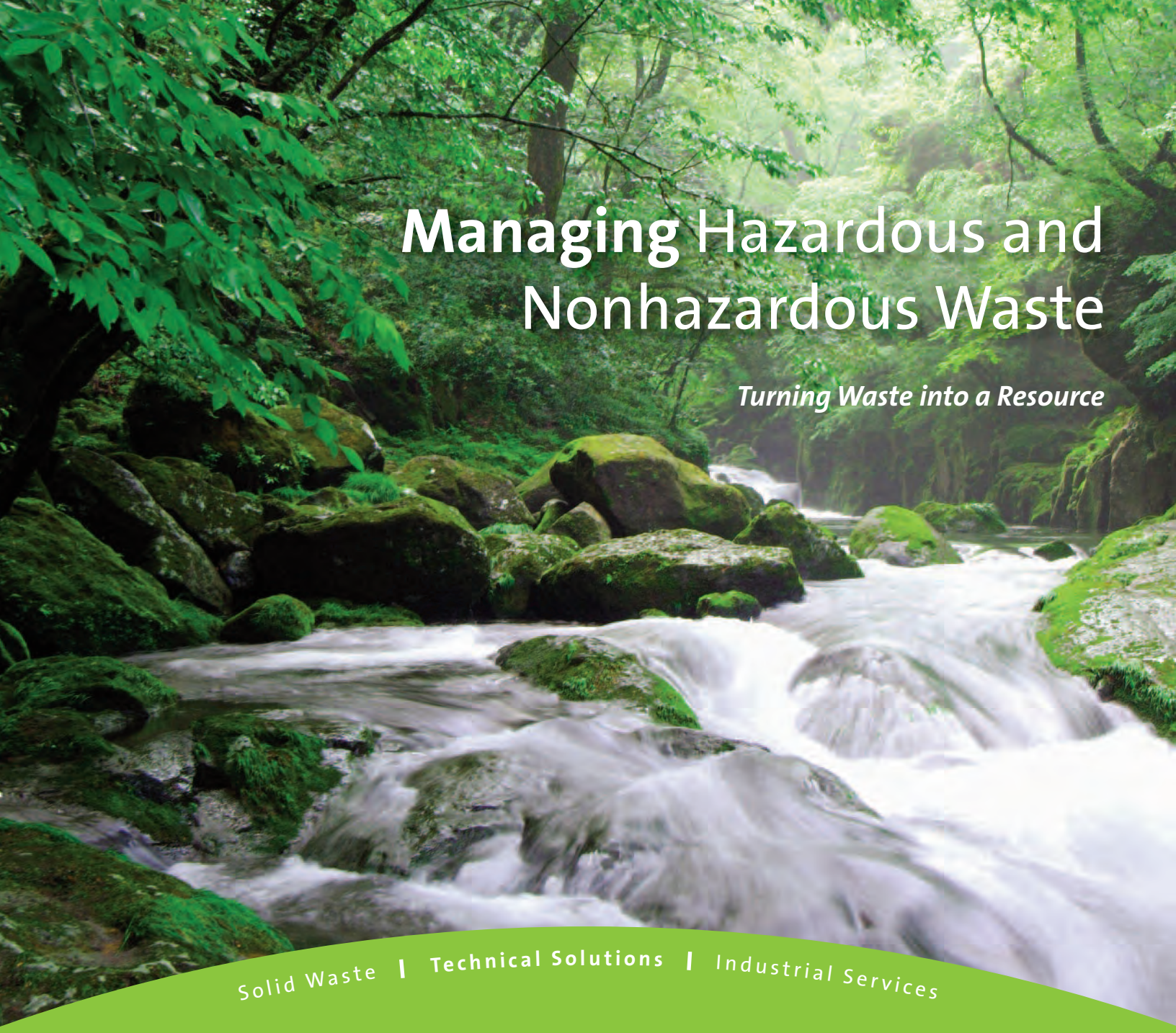
SUMMARY OF FACILITY CLOSURE COST ESTIMATES

UNIT	COST
Container Storage Unit	$283,175.00
Drum Repack/Bulking/Decant Unit	$70,019.00
Southeast Container Storage Unit	$181,596.00
Stabilization Unit	$220,089.00
Other Closure Activities	$32,266.00
Certification and Inspection	$20,000.00
Subtotal	$807,145.00
Administrative Costs (5% of Subtotal Cost)	$40,357.25
Contingency @ 10%	$80,714.50
TOTAL	$928,216.75

TABLE 8-4

SUMMARY OF FACILITY CLOSURE COST ESTIMATES

UNIT	Working Day of Closure Commence	Working Day of Closure Complete
Container Storage Unit	1	22
Drum Repack/Bulking/Decant Unit	8	21
Southeast Container Storage Unit	25	60
Stabilization Unit	1	60
Other Closure Activities	1	60
Final Closure	1	60



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VEOLIA ENVIRONMENTAL SERVICES

Why Veolia ES Technical Solutions

Managing Hazardous and Nonhazardous Waste

When you manage multiple environmental responsibilities, including hazardous waste and its associated liability, you must rely on the capabilities and expertise of your service provider. Veolia ES Technical Solutions (Veolia) stands alone in meeting the criteria you use to determine the most viable environmental service partner.

From on-site services and transportation to final treatment or disposal, Veolia assures regulatory compliance by channeling hazardous and nonhazardous waste and related information through its network of nearly 400 company owned or certified service centers nationwide. These service centers include treatment, recovery and disposal facilities, sales offices and transportation locations.

Environmental Compliance

Veolia maintains an excellent record of compliance with environmental regulations. This record is ready for inspection at any time. A culture of compliance is a way of life at Veolia, where we manage hazardous and nonhazardous waste with the utmost care. We follow procedures meticulously with our on-site teams, and continue to focus on the details throughout transportation, treatment and disposal. Our waste processing, storage and disposal locations are routinely audited and certified, and all disposal documentation is verified to assure compliance.

Financial Strength

Our parent is Veolia Environnement, a publicly owned company with over 150 years of experience delivering environmental solutions. The Paris-based company is the international leader in providing environmental services for waste, water, energy and transportation. With over $49 billion in revenue, it is the largest environmental services company in the world.

Technical Expertise

Our account, project and technical representatives understand hazardous and nonhazardous waste and the related regulatory requirements. Over 1,600 Veolia employees are ready to assist you in any way—from providing information about government regulations and answering technical questions regarding treatment alternatives, to training your employees and setting up disposal programs that save you time and money.

Excellent Health and Safety Record

Safety is critical in our business, and Veolia's safety record is strong. Our OSHA log summary shows a recordable injury case rate that is less than half the average for the North American Industry Classification System, and a lost time injury case rate that is less than 10% of the NAICS average. Similarly, our Experience Modification Rate, which is used by the insurance industry to determine premiums for workers compensation insurance and is based on past safety performance, is lower than 96% of our competitors. The reason for our excellent record is, simply, training excellence. Our field employees alone receive nearly twice as much training than is required by government regulations.

Innovation through Research

Veolia Environnement has established the only research and development program in the world dedicated to environmental services, with laboratories in France, Australia, Germany, the United Kingdom, and the United States. This program develops technical innovations for nonhazardous and hazardous waste processes, recovery and disposal, supporting Veolia's commitment to environmental sustainability. Locally, we use these innovative processes to improve our efficiencies in recycling electronic waste, metal scrap and organic solvents.

Reuse, Recycle, Reduce Waste

To ensure the most cost effective waste processing, we evaluate your waste streams to reduce overall waste volume and expense, while minimizing environmental impact. We always look for ways to reuse, recycle and reduce waste, including using waste as a product. Annually, Veolia transforms over 400 million pounds of waste into a resource through energy recovery, recycling and product substitution. Over 60 million pounds of that waste was converted into usable products, rather than considered hazardous waste under RCRA. Throughout all of our operations, we are pursuing waste treatment options to assure sustainability.

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Reclaimable organic solvents

Capabilities for Each Location

Full Service

Not All Services Available

Sales/Processing/Other

Site Name	State	Phone	Customer Service Level	Sales Office	Incineration	Energy Recovery (Fuels Blending)	Recycling & Recovery	Stabilization/Landfill	Lighting & Electronic Recycling	Permitted TSDF	10 Day In Transit
Phoenix	AZ	602-233-2955	●	○					○	○	○
Azusa	CA	800-395-6726	●	○		○	○			○	○
Fremont	CA	800-325-2382	●	○							○
Huntington Beach	CA	800-303-6320	●	○							○
Richmond	CA	800-243-2382	●	○						○	
Sacramento	CA	916-379-0872	●	○							○
San Diego	CA	800-956-5782	◐	○							○
Henderson	CO	303-289-4827	●	○		○	○			○	○
Newington	CT	860-667-6003	●	○							
Tallahassee	FL	850-877-8299	◐	○					○	○	
Morrow	GA	800-443-5645	●	○						○	○
Lombard	IL	800-667-2387	◐	○							
Lombard	IL	630-364-1760	◐				○				
Sauget	IL	618-271-2804	●	○	○					○	○
East Chicago	IN	800-548-4458	●	○							○
Indianapolis	IN	317-917-3904	●	○							
Louisville	KY	502-375-2386	●	○							○
Baton Rouge	LA	225-293-4600	◐	○							
Marlborough	MA	800-354-2382	●	○							
Stoughton	MA	781-341-6080	◐	○					○		
Livonia	MI	734-632-8459	●	○							○
Blaine	MN	888-887-9457	●	○							○
Mooresville	NC	704-662-3044	●	○							○
Creedmoor	NC	919-528-3996	●	○						○	○
Flanders	NJ	800-426-2382	●	○						○	○
Middlesex	NJ	732-469-5100	●	○		○	○			○	○
Colonie	NY	518-382-0246	●	○							○
Tonawanda	NY	716-879-0600	●	○							○
Wantagh	NY	516-221-8300	●	○							○
North Jackson	OH	330-538-0600	●	○			○				○
West Carrollton	OH	937-859-6101	●	○		○	○			○	○
Philadelphia	PA	800-423-2382	●	○							○
Wampum	PA	724-535-5777	◐	○			○			○	○
York	PA	888-877-2387	●	○							○
Gurabo	PR	787-744-0070	●	○							○
Baytown	TX	800-624-9302	●	○							○
Port Arthur	TX	409-736-2821	●	○	○					○	○
North Salt Lake	UT	801-294-7111	●	○							○
Fredericksburg	VA	540-368-9780	●	○							○
Richmond	VA	804-233-6980	●	○							○
Kent	WA	425-272-0772	●	○							○
Vancouver	WA	360-260-0882	●	○							○
Greenville	WI	920-757-5265	◐	○							
Menomonee Falls	WI	800-255-5092	●	○		○		○		○	○
Port Washington	WI	262-243-8900	●	○					○	○	○
Poca	WV	304-759-1055	●	○							○

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  - Lab Packing Using Computerized System
  - Chemical Inventory
  - Equipment Decontamination
- Low-Level Radioactive Waste
- Medical Waste Services
- Online Services
  - Web-Based Waste Profiling, Invoicing and Reporting
- On-Site Services
- Program Management
- Reactive Chemicals Management
  - Remote Opening
  - Specialized Packaging and Transport
  - High Hazard Chemicals
- Recycling and Recovery
  - Ethanol Recovery/Secure Brand Destruction
  - Solvents and Thinners
- Remediation
- Secure Beverage Destruction/Ethanol Production
- Specialty Services
  - Unknown Drum Identification
  - Cylinder Sampling, Identification and Disposal
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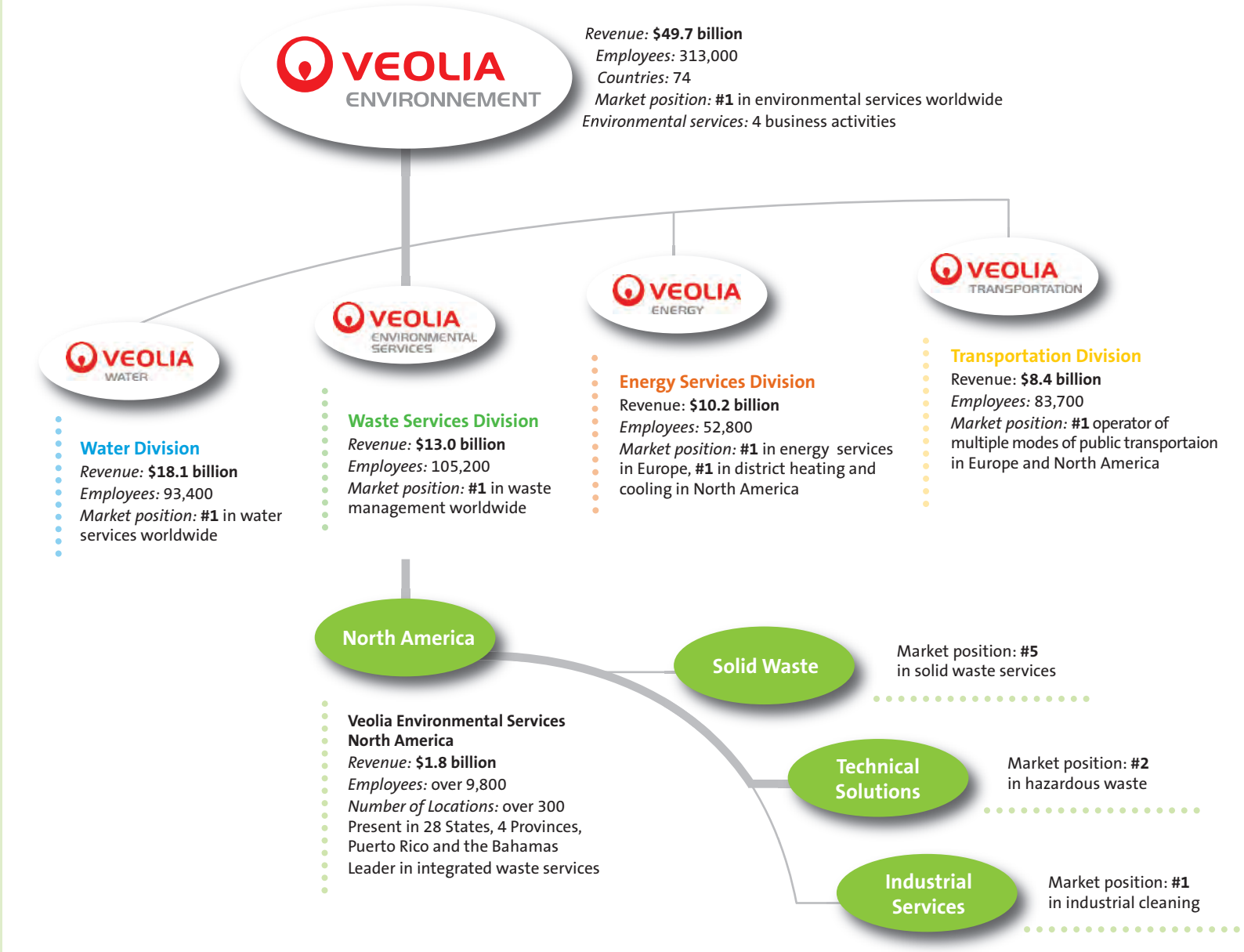

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S E C T I O N I X

MANIFEST SYSTEM, RECORD KEEPING, AND REPORTING

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

9.0 MANIFEST SYSTEM, RECORD KEEPING AND REPORTING

9.1 Review of Manifest

Veolia ES Technical Solutions, L.L.C. in Menomonee Falls, WI (Veolia – Menomonee Falls) is a generator of hazardous waste, and also a licensed/permitted treatment and storage facility. Hazardous waste transported to and from Veolia – Menomonee Falls is accompanied by a Uniform Hazardous Waste Manifest (manifest).

Designated Veolia – Menomonee Falls personnel are required to sign and date all manifests accompanying shipments of wastes in order to certify that the waste received is what is stated on the manifest. Discrepancies in a manifest are noted and immediately investigated. If the discrepancy cannot be resolved within 15 days, Veolia – Menomonee Falls will provide to WDNR written notification, describing the discrepancy and the attempts to rectify the problem.

9.2 Export of International Shipments

Pursuant to NR 662.053, when shipping hazardous waste outside of the United States, Veolia – Menomonee Falls will notify the department and the EPA administrator in writing 60 days before the initial shipment. The notifications will be resubmitted each 12 months should the export shipments continue beyond an initial 12 month period. Notices sent to the EPA administrator will be sent to the following address:

Office of Enforcement and Compliance Assurance
Office of Compliance; Enforcement Planning, Targeting, and Data Division (2222A)
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

The notation “Attention: Notification of Intent to Export” will be prominently displayed on the front of the envelope.

Office of Enforcement and Compliance Assistance

1. The Facility Manager or Designee will sign the notification, and provide the following information:

    a. The name, mailing address, telephone number, and EPA ID Number of Veolia – Menomonee Falls.

    b. By consignee, for each hazardous waste type, all of the following

        i. A description of the hazardous waste and the EPA hazardous waste number, U.S. DOT proper shipping name, hazard class, and ID Number.

        ii. The estimated frequency or rate at which the waste is to be exported and the period of time over which the waste is to be exported.

        iii. The estimated total quantity of the hazardous waste in units as specified in Table II of the Appendix to 40 CFR Part 262.

        iv. All points of entry to and departure from each foreign country through which the hazardous waste will pass.

        v. A description of the means by which each shipment of the hazardous waste will be transported and type of container.

        vi. A description of the manner in which the hazardous waste will be treated, stored, or disposed of in the receiving country.

vii. The name and site address of the consignee and any alternate consignee.

viii. The name of any transit countries through which the hazardous waste will be sent and a description of the approximate length of time the hazardous waste will remain in the country and the nature of its handling while there.

2. Except for changes to the telephone number, mode of transportation used and decreases in the quantity indicated on the notification, when any condition specified on the original notification changes, Veolia – Menomonee Falls will:

    a. Provide EPA with a written notification of the change; and

    b. Delay shipment until:

        i. The receiving country consents to the change(s) and all points of entry also consent to the change(s); and

        ii. Written acknowledgement of consent to the change(s) is received from EPA.

3. All additional information which may be requested by the department and/or EPA, on behalf of the receiving country, will be provided.

When a shipment cannot be delivered for any reason to the designated or alternate consignee; Veolia – Menomonee Falls will:

1. Renotify the Department and EPA of the change in the conditions of the original notification to allow shipment to a new consignee in accordance with s. NR 662.053(3) and obtain an EPA acknowledgement of consent prior to delivery; or

2. Instruct the transporter to return the waste to Veolia – Menomonee Falls in the United

States, or designate another facility in the United States; and

3. Instruct the transporter to revise the manifest.

Veolia – Menomonee Falls shall require the foreign consignee to confirm in writing the delivery of the hazardous waste to the facility in the foreign country and to describe any significant discrepancies between the manifest and the shipment. A copy of the manifest signed by the foreign consignee may be used for this purpose.

Veolia – Menomonee Falls shall meet the requirements under s. NR 662.054 for the manifest, except that:

1. In lieu of the name, site address, and EPA ID number of the designated permitted facility, enter the name and site address of the consignee.

2. The name and address of any alternate consignee shall be used as a licensed alternate facility, if any.

3. In the International Shipments Block, check the export box and enter the point of exit (city and state) from the United States.

4. Add the statement "and conforms to the terms of the attached EPA acknowledgement of consent" to the end of the first sentence of the certification set forth in item 16 of the uniform hazardous waste manifest form.

A copy of the EPA acknowledgment of consent shall be attached to the manifest that will accompany the hazardous waste shipment.

Veolia – Menomonee Falls will provide the transporter with an additional copy of the manifest for delivery to the U.S. customs official at the point the hazardous waste leaves the United States.

An annual report will be submitted to the Department and the EPA no later than March 1 of each year, summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year. The annual reports will include the following information:

1. The EPA identification number, name, and mailing and site address for Veolia – Menomonee Falls.

2. The calendar year covered by the report.

3. The name and site address of each consignee.

4. By consignee, for each hazardous waste exported, a description of the hazardous waste, the EPA hazardous waste number, U.S. DOT hazard class, the name and U.S. EPA ID number for each transporter used, the total amount of waste shipped and number of shipments for each notification.

5. A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated (to the extent applicable to a TSDF).

6. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years (to the extent applicable to a TSDF).

7. The certification, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

8. The annual reports will be submitted to:

   Office of Enforcement and Compliance Assurance
   Office of Compliance; Enforcement Planning, Targeting, and Data Division (2222A)
   U.S. Environmental Protection Agency
   1200 Pennsylvania Ave., NW
   Washington, DC 20460

A copy of each notification of intent to export, EPA acknowledgement of consent, and confirmation of delivery of the hazardous waste from the consignee will be retained for a period of at least three (3) years from the date that the hazardous waste was accepted by the initial transporter.

A copy of each annual report will be retained for a period of at least three (3) years from the due date of the report.

An exception report will be filed with the Department and the EPA pursuant to s. NR 662.055, if:

1. Veolia – Menomonee Falls has not received a copy of the manifest signed by the transporter stating the date and place of departure from the United States within 45 days from the date it was accepted by the initial transporter.

2. Within 90 days from the date the waste was accepted by the initial transporter, Veolia – Menomonee Falls has not received written confirmation from the consignee that the hazardous waste was received.

3. The waste is returned to the United States.

9.1.2 Import of International Shipments

Pursuant to s. NR 662.060, when importing wastes from another country, Veolia – Menomonee

Falls will ensure that all of the requirements of s. NR 662.020(1) for manifesting are met, except:

1. In place of the generator's name, address, and EPA identification number, the name and address of the foreign generator and the importer's name, address, and EPA identification number shall be used.

2. In place of the generator's signature on the certification statement, the U.S. importer or an agent shall sign and date the certification and obtain the signature of the initial transporter.

3. The international shipments block on the uniform hazardous waste manifest will be checked and the point of entry into the United States (city and state) will be identified.

4. Veolia – Menomonee Falls will provide a copy of the manifest to EPA in accordance with 40 CFR 264.71(a)(3).

In addition to the above, Veolia – Menomonee Falls will require that the importer certify that all chemical substance(s) in the shipment comply with all applicable rules or orders under TSCA and that the chemical substance(s) are not being offered for entry in violation of TSCA or any applicable rule or order under TSCA.

In the event that Veolia – Menomonee Falls is the importer of the waste, the facility will ensure that the appropriate certifications are in place.

9.2 Procedures for Accepting and Rejecting Shipments of Hazardous Waste

9.2.1 Acceptance of Shipments of Hazardous Waste

- When a shipment of hazardous waste arrives at the Veolia – Menomonee Falls facility,

the uniform hazardous waste manifest is reviewed by site personnel to verify compliance with all RCRA and DOT requirements.

- Site personnel then sample ten percent of the incoming containers, per profile, of if the shipment is a bulk shipment, a grab sample is collected from the bulk load.

- The samples are analyzed in accordance with the Waste Analysis Plan.

- The laboratory analysis verifies that the waste conforms to the waste profile sheet, the uniform hazardous waste manifest, and the site waste analysis plan and permit, and the waste is approved for acceptance.

- At this time, Sections 19 and 20 of the uniform hazardous waste manifest are completed and the waste is placed into storage or treated on-site.

- The manifest copies are forwarded to the appropriate parties.

9.2.2 Rejection of Partial Shipments of Hazardous Waste

- When a shipment of hazardous waste arrives at the Veolia – Menomonee Falls facility the uniform hazardous waste manifest is reviewed by site personnel to verify compliance with all RCRA and DOT requirements.

- Site personnel then sample ten percent of the incoming containers, per profile. Partial rejection of bulk shipments is not possible.

- The samples are analyzed in accordance with the Waste Analysis Plan.

- The laboratory analysis determines that a portion or portions of the waste do not conform to the waste profile sheet, the uniform hazardous waste manifest, or the site permit.

- If the analysis indicates that the does not conform to the waste profile, all waste indicated by the waste profile is sampled and analyzed.

- All information regarding non-conformance and/or discrepancies is reported to the Veolia – Menomonee Falls Facility Service Representative, or designee. The Customer Service Representative, or designee, contacts the customer in an attempt to resolve all discrepancies.

- If the non-conformance and/or discrepancies are resolved, the procedures for the acceptance of shipments of hazardous waste, Section 9.2.1, are completed.

- If all or a portion of the non-conformance and/or discrepancies cannot be resolved, a portion of the waste shipment is rejected from the Veolia – Menomonee Falls facility.
- At this time Section 18, Discrepancy Section, is completed by checking the Partial Rejection Box and the new Manifest Number for the rejected portion of the shipment.

- Sections 19 and 20 of the manifest should also be completed for the wastes that will be accepted at the Veolia – Menomonee Falls facility.

- Complete the new uniform hazardous waste manifest designating the new TSDF or the generator's name and address as the receiving facility.

- Attach a copy of the original uniform hazardous waste manifest to the new manifest.

- The manifest copies are forwarded to the appropriate parties.

9.2.3 Rejecting Complete Shipments of Hazardous Waste

- When a shipment of hazardous waste arrives at the Veolia – Menomonee Falls facility the manifest is reviewed by site personnel to verify compliance with all RCRA and DOT requirements.

- Site personnel then sample ten percent of the incoming containers, per profile, or, if the shipment is a bulk shipment, a grab sample is collected from the bulk load.

- The samples are analyzed in accordance with the Waste Analysis Plan.

- The laboratory analysis determines that the shipment does not conform to the waste profile, the uniform hazardous waste manifest, or the permit.

- For non-bulk shipments if the analysis indicates that the waste does not conform to the waste profile, all waste indicated by the waste profile is sampled and analyzed.

- All information regarding non-conformance and/or discrepancies is reported to the Veolia – Menomonee Falls Facility Service Representative, or designee. The Customer Service Representative, or designee, contacts the customer in an attempt to resolve the non-conformances and/or discrepancies.

- If the non-conformances and/or discrepancies are resolved, the procedures for the acceptance of shipments of hazardous waste, Section 9.2.1, are completed.
- If the non-conformances and/or discrepancies are not resolved, the entire waste shipment is rejected by the Veolia – Menomonee Falls facility.

- At this time, Section 18, Discrepancy Section, of the uniform hazardous waste manifest is completed and the Full Rejection Box on the manifest is checked.

- If the transporter that delivered the hazardous waste to the Veolia – Menomonee Falls facility has not left the site, the waste can be rejected on the original manifest by completing section 18b with the Alternate facility or the original generator's name, address, and EPA ID number.

- If the transporter has left the Veolia – Menomonee Falls facility a new uniform hazardous

waste manifest must be completed for the rejected shipment. The new manifest number is entered into Section 18 and the new manifest is completed indicating Veolia – Menomonee Falls name, address, and EPA ID number as the generator of the waste and the Alternate facility or the original generator name, address, and EPA ID number as the designated facility.

- If a new manifest is utilized, the original manifest will be attached to the new manifest.

9.3 Review of Manifest Prior to Shipment

The following manifest system, or a similar system, is incorporated into the Veolia – Menomonee Falls operations:

- Any generator who transports, or offers for transportation, hazardous waste for off-site storage, treatment, disposal, or recycling shall prepare a uniform hazardous waste manifest form before the waste is transported.

- A generator will specify on the uniform hazardous waste manifest one designated facility. The designated facility must be a permitted hazardous waste TSDF, an interim status hazardous waste facility, or exempt from permitting under RCRA approved to accept and manage the hazardous waste.

- A generator may also specify on the uniform hazardous waste manifest one alternate facility which meets the requirements for the acceptance and management of the hazardous waste in the event that an emergency prevents the delivery of the waste to the primary designated facility.

- If the transporter is unable to deliver the hazardous waste to the designated facility, or the alternate facility, the generator shall either designate another alternate facility or instruct the transporter to return the waste.
- Veolia – Menomonee Falls will maintain on file the copies of the manifests in accordance

with s. NR 662.040 and 664.0071(1)(b)(5) for a period of 3 years from the date the waste was accepted by the initial transporter, and shall be available at reasonable times for inspection by the Department or EPA.

- Within 45 days of the receipt of a shipment of hazardous waste, Veolia – Menomonee Falls will provide a copy of the uniform hazardous waste manifest bearing all required signatures to the Department in an electronic format specified by the Department.

9.4 Reporting and Recordkeeping

9.4.1 Annual Report

Veolia – Menomonee Falls will prepare and submit a single copy of an annual report to the Department by March 1 of each year. The annual report shall be submitted on Department forms, shall cover facility activities during the previous calendar year, and at a minimum, shall include the following information:

1. The EPA identification number, name, and address of the facility.
2. The calendar year covered by the report.
3. The EPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the year. For imported shipments, the report shall give the name and address of the foreign generator.
4. A description and the quantity of each hazardous waste the facility received during the year.
5. The method of treatment, storage, or disposal for each hazardous waste.
6. The most recent closure cost estimate under s. NR 664.0142.
7. A description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated.
8. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years.
9. The certification signed by the owner or operator of the facility or an authorized

representative.

A copy of the annual reports will be maintained for a period of at least three years from the due date of the reports.

9.4.2 Other Reports and Records

- Veolia – Menomonee Falls maintains a computerized (written) operating record which will be maintained until the closure of all RCRA units. The operating record contains the types and quantities of wastes received; the methods and dates the wastes were treated, stored, or shipped off-site; the location of received wastes which can be cross-referenced to manifests; incident reports that required implementation of the contingency plan; data and reports resulting from releases from solid waste management units.

- Waste Analysis Reports, as described in Section 3.0 and the Waste Analysis Plan, for all hazardous waste streams managed at the facility will be maintained for at least three years.

- Veolia – Menomonee Falls complies with the reporting and recordkeeping requirements associated with the Land Disposal Restrictions requirements in 40 CFR Part 268.

9.5 Wisconsin Ownership Interests

As required under Wisconsin Statutes a copy of the operations in Wisconsin that Veolia ES Technical Solutions, L.L.C. has an ownership in is provided in Appendix E.

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OPERATOR CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Date: 12-19-12

Signature: _____

John Flaminio
Branch General Manager

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road, Menomonee Falls, WI 53051
tel: 262-255-6655 - fax: 262-255-6655
www.VeoliaES.com

A p p e n d i x A

Inspection Program Plan

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

APPENDIX A

INSPECTION PROGRAM PLAN

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENONOMEE FALLS, WISCONSIN

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INSPECTION PLAN

In accordance with the regulatory requirements set forth in 40 CFR 264.15 and Wis. Adm. Code (WAC) NR 664.0015, Veolia ES Technical Solutions, L.L.C. – Menomonee Falls (Veolia) has developed this Inspection Program Plan as an integral part of the Feasibility Report and Plan of Operation. The procedures set forth in this plan dictate that this facility will be in compliance with all requirements of 40 CFR 164.15 and WAC NR 664.0015. A copy of this plan will be available at the facility at all times.

1.0 INTRODUCTION

This Inspection Program Plan is intended to provide a mechanism to prevent and detect system malfunctions, equipment deterioration, and operator errors that if allowed to continue without remedial action might ultimately lead to a release of hazardous waste constituents to the environment or create a threat to human health. The inspection program is designed to provide an early warning of the potential for such events in order that corrective and preventive actions may be taken in a timely manner.

The inspection program is divided into two segments: (1) a general facility inspection, and (2) specific process unit inspections. The first focuses on items that apply to facility-wide operations - site security, safety, emergency equipment, and environmental monitoring systems are included under this category. Inspections of specific storage and process units - such as the Laboratory, Container and Bulk Storage Units, Waste Stabilization Unit, and the Container Repack/Depack/Decant Unit - are included in the second category. The inspection plan for the treatment units encompasses the process-specific monitoring and control systems and their associated structures.

The inspection program is implemented by qualified individuals assigned the responsibility to detect any unsafe conditions at the facility and prevent adverse consequences. The designated individuals have the training and authority to: (1) implement the required

inspection, (2) perform necessary evaluations and hazard assessments, and (3) recommend appropriate corrective or remedial actions.

Inspections are performed according to a pre-determined schedule based on regulatory requirements, engineering knowledge, and operational and safety experience with the systems and processes involved. Each inspection item has the content and frequency necessary to alert facility personnel *prior to* the development of a serious problem. A trained and qualified inspector evaluates and assesses each inspection item and indicates equipment deterioration, potential malfunction, or operator error through regular observation of the process and procedures. The level of response and its timing are determined by the nature and seriousness of the problem identified with protection of personnel and the prevention of adverse environmental impact being of paramount concern.

2.0 INSPECTION PROGRAM ADMINISTRATION

The facility Environmental Health & Safety (EH&S) Manager is fully responsible for implementation and maintenance of the Inspection Program. In addition to the EH&S Manager, trained facility personnel (inspectors) are designated with the staff responsibility for performance of the actual site inspections. Reports of the results of the inspections, with appropriate documentation, are made to the EH&S Manager with notifications to the General Manager as appropriate. The EH&S Manager is then responsible for directing the appropriate facility functional units to implement required remedial and corrective measures and for establishing a timeframe within which they must occur.

2.1 PERSONNEL QUALIFICATIONS

Each inspector is trained in hazardous waste management, fundamentals of material hazards assessment, inspection and follow-up procedures, documentation and recordkeeping requirements, and various safety and contingency plan procedures. The qualifications and duties

of the EH&S Manager and other inspectors are included in their respective Position Descriptions in the Training Plan (Section 6).

2.2 HAZARD ASSESSMENT AND EVALUATION PROCEDURES

The inspector must be familiar with the location of the equipment and systems to be inspected and their normal configuration. For any discrepancy observed, the inspector shall determine the potential for personnel injury or for release of hazardous waste constituents, and he/she shall assess the nature and timing of remedial action required. The assessment shall consider: (1) the location and nature of the problem, (2) the presence of secondary containment or control, (3) the amount and type of waste material involved, (4) the potential for human exposure, and (5) the likelihood of waste migration. Where a hazard is imminent or has already occurred, remedial action shall be taken *immediately*.

The inspector shall maintain open lines of communication with the facility's EH&S Manager and with the General Manager as appropriate. The managers must depend on the inspector's judgment and advice regarding physical constraints on and the scope of corrective actions, response, timing, interim controls, and counter-measures.

When an inspection indicates equipment malfunction or deterioration or any other improper conditions, the following actions shall be taken at a minimum:

- Assess the situation.
- Determine the corrective or remedial measures needed in response to the situation, including appropriate interim measures.
- Establish the timeframe within which the remedial action must occur. (For emergency or near-emergency situations, prompt verbal reports shall be made to the EH&S and General Managers, to be followed later with written reporting. For minor discrepancies, routine written reporting procedures as discussed later will be followed.)

- Provide adequate follow-up to verify that the specified response has occurred and that the situation has been resolved satisfactorily.

In general, all remedial action and re-inspections are expected to be completed in a timely manner - on a schedule which ensures that the problem does not lead to an environmental or human health hazard. In specific cases where urgent action is required, coordination with appropriate facility personnel and frequent monitoring of the situation by the inspector, General Manager, and EH&S Manager will be continued until all remedial actions are completed. In cases where physical and/or operational constraints may require longer timeframes to complete the corrective action (e.g., replacement equipment availability), a final inspection shall follow completion of the work.

2.3 DOCUMENTATION AND RECORDKEEPING

Inspections and subsequent re-inspections are conducted and documented using forms specifically designed to contain all findings and corrective action information. With the completed inspection forms, the inspector initiates work orders, as necessary, for the required remedial actions. A unique Remedial Work Order (RWO) form is generated by the inspector for each discrepancy that is not immediately resolved. Immediately is defined as those issue corrected during the current operating shift. A copy of the RWO form is provided in Appendix IPP-1. At a minimum, the form includes the date and time of the inspection, the name of the inspector, a description of the observations made, and the date and nature of and repairs or other remedial actions. The completed RWO form is forwarded to the EH&S Manager and to the appropriate Facility Manager for implementation. As needed, either the General Manager, EH&S Manager, and/or subsequent inspectors will re-inspects the work performed to verify that it was satisfactorily completed. All completed forms and attachments are accumulated in the facility operating records and are archived at the facility for a minimum period of three (3) years from the date of inspection.

Separate inspection forms are provided for specified daily, weekly, or other periodically-scheduled inspections. The inspection forms are prepared in advance to include pertinent items of equipment to be inspected according to the specific schedules shown later in this plan. These forms may be periodically modified as appropriate to accommodate operational changes made at the facility or to include revision of pertinent regulations.
Copies of typical daily and weekly inspection forms are provided in Appendix IPP-2.

Each periodic inspection form includes relevant administrative information, such as the identification of the facility units, the name of the inspector, and the date and time of the inspection. The remainder of the inspection form is a checklist section used for indicating the status of designated equipment or structures. The inspector's assessment, including the date and nature of any repairs or other remedial actions, if applicable, are also marked on the form. The completed form is delivered to the EH&S Manager for review and appropriate action as necessary.

A separate RWO form is used initially by the inspector to initiate each corrective action and later to document whether each discrepancy identified during an earlier inspection has been adequately corrected. This form allows the inspector to describe the specific equipment or process unit involved, the nature of the discrepancy identified, and the date of the inspection. It also prompts the inspector to describe the required response action, assign the date which the response is to be implemented, and name the person responsible for such action. During the next scheduled inspection following the date which the corrective action was to be completed, the lower portion of the RWO is used by the inspector to confirm and document that the corrective action has been made.

Veolia is also evaluating the use of electronic site inspections. When implemented, the inspector will record the required inspection element responses electronically on a mobile tablet or similar recording device. Once a particular inspection is completed, the corresponding electronic inspection form would be saved to an internal network server at the facility. The network server is accessible from most site work stations, is backed up nightly at an off-site

location, and would allow for the electronic inspections to be maintained for a minimum of three years following the date of the inspection.

In summary, the inspector observes facility operations and equipment on a periodic basis in accordance with a specified schedule and specific inspection elements. When a discrepancy is noted, the inspector initiates required corrective actions. An RWO form is created for each significant discrepancy and a corrective action plan is implemented. In cases where specialized outside contractors are used to perform testing or inspection services, (e.g., annual ultrasonic wall thickness testing of tanks, fire extinguisher inspections, etc.), the results are documented on the report provided by the contractor. These reports are made part of the inspection log or are retained in the facility operating records as appropriate. The EH&S Manager is responsible for ensuring the corrective actions are appropriate and adequate for a deficiency and that a response fully address an issue.

3.0 GENERAL FACILITY INSPECTION

The general facility inspection activity encompasses the facility perimeter and those items within the property that are common to all operations (i.e. those that are not process-specific). The general facility inspection activities encompass the following:

- Security Devices
- Environmental Monitoring Systems
- Safety and Emergency Equipment

The general inspection schedules, including inspection parameters and frequency, are determined by the types of problems that can potentially occur and their impact to the environment or human health.

3.1 TYPES OF POTENTIAL PROBLEMS

The following considerations are pertinent to identification to the types of problems that may occur related to general facility operations:

- Breach of security (either intentional or unintentional) caused by persons or natural (e.g. climatological) events. Such a breach may occur due to: (1) failure of the surveillance system, (2) damage to fences or entry control structures, (3) obstruction, damage, or loss of warning signs, or (4) unauthorized entry.
- Unplanned releases not detected by environmental monitoring equipment due to malfunction or failure. Such problems may also occur due to failure of containment structures if not kept in good repair.
- Health and safety equipment failure, absence, or inaccessibility.
- Sudden loss of commercial electrical power supply or other utilities.

The general facility inspection is designed to prevent or identify such problems.

3.2 GENERAL INSPECTION SCHEDULES

The general inspection schedules are based on the facility's operational mode, potential failure modes, and an assessment of the hazard magnitude posed by a particular malfunction, failure or discrepancy. Schedules designed for inspection of Security Devices and for Safety and Emergency Equipment as provided in Tables 3-1 and 3-2 respectively.

Table 3-1

General Inspection Schedule - Security Devices

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Fence	• Inspect entire perimeter for breaches or damage	Weekly
Gates	• Check for structural damage	Weekly

	• Check for proper gate lock functionality	Weekly
Security Systems	• Check for operation	Daily
Warning Signs	• Check for presence and legibility	Weekly
Communications	• Confirm telephones are accessible and operational (internal and external lines)	Daily

Table 3-2

General Inspection Schedule – Safety and Emergency Equipment

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Protective Gear (helmets, face shields, breathing apparatus, etc. used for emergency situations)	• Check accessibility • Check for deterioration or damage • Check for function	Daily Weekly Weekly
First Aid Kits	• Check accessibility • Check for adequate supply	Weekly Weekly
Emergency Safety Stations (Showers & Eyewashes)	• Ensure that units activate and shut off properly • Check accessibility • Ensure locations are properly identified	Weekly Weekly Weekly
Alarm Systems (internal sirens)	• Check audible alarm	Monthly
Internal and External Communication Systems (phone and radio)	• Check for operation	Daily
Fire Extinguishers	• Check pressure gauge for full charge indication • Check inspection tag to ensure annual maintenance by fire service provider is up to date • Check seal to ensure unit is unused • Ensure access to units	Weekly Weekly Weekly Weekly

Spill Control Stations	• Check for accessibility and adequate supply of absorbent	Daily
	• Check for accessibility and adequate supply of recovery drums	Daily
	• Check for accessibility and adequate supply of other emergency and decontamination equipment	Daily
	• Check for deterioration or damage to other emergency and decontamination equipment	Daily

4.0 PROCESS SPECIFIC INSPECTION ACTIVITIES/SCHEDULES

The operational unit and process system locations at the facility listed below are subject to process-specific inspection schedules and procedures presented in this section:

- Laboratory
- 800-Container Storage Unit
- Container Depack/Repack/Bulking/Decant Units
- Waste Stabilization and Storage Building
- 48 Container Roll-off/Lugger Box Storage Unit

Equipment and structures at each location will be regularly inspected for malfunction, deterioration, failure, operator errors or other causes which could endanger human health or the environment. The types of potential problems and the hazards uniquely associated with each location are used to establish the inspection elements (parameters) and frequency of inspection presented in the following sections.

4.1 LABORATORY INSPECTION

The Wisconsin DNR certified laboratory at Veolia is primarily designed to support facility operations. Laboratory activities include development of waste stabilization recipes,

waste fingerprinting and compatibility testing, and non-hazardous waste confirmation analysis. The principal concern in the facility's chemical laboratory is the potential for an unanticipated explosion or fire, or an inadvertent spill of hazardous waste constituents due to improper handling, storage, or disposal of samples. Failure of the ventilation or hooding systems, improper placement or storage of samples, and contamination of or damage to sampling and testing equipment also are inspection concerns.

Pertinent inspection parameters and frequencies of inspection for the on-site laboratory are summarized in Table 4-1.

Table 4-1

Laboratory Inspection Parameters and Schedule

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Sample Disposal System	• Ensure containers are labeled and closed • Check if proper disposal procedures are in use	Daily Daily
Ventilation/Hood Systems	• Check operation and adequacy • Capable of containing minor spills	Daily Weekly
Sampling Equipment	• Check for proper placement and decontamination of reusable equipment	Daily
Laboratory Waste Materials	• Contaminated laboratory waste in proper containers • Containers properly labeled, closed, and stored	Daily Daily
Reagents	• Reagent handled, labeled, and stored according to hazard class	Weekly
Sample Storage	• Samples stored properly and safely • Flammables in flammable storage area • Acids stored in corrosion-resistant cabinet • Storage area clean, orderly, and well lit • Incompatible materials stored separately	Weekly Weekly Weekly Weekly Weekly
Safety & emergency response equipment & supplies	• Adequate supply present and it good condition	Daily & Weekly

4.2 800 CONTAINER STORAGE UNIT INSPECTION

The 800 Container Storage Unit is the site's primary container storage location. The building is permitted for a maximum total capacity of 44,000 gallons of material, individual packagings with up to a 220-gallons capacity, and for material with various hazard classes. Due to the building's capacity, the large number of containers and their frequent movement, inspection element emphasis is given at a more frequent (typically daily) rate.

The potential problems of concern related to the facility's 800-Container Storage Unit include:

- Spills in loading/unloading area
- Deteriorated, damaged or leaking containers
- Failure or deterioration of secondary spill containment structures
- Improper placement or stacking of drums
- Damaged storage racks
- Damaged industrial lift trucks
- Improper operation of the ventilation system
- Improper operation of lighting systems
- Cracks in secondary containment systems
- Unsafe loading/unloading conditions

The elements and frequency of inspection for the 800 Container Storage Unit are shown in Table 4-2.

Table 4-2

800 Container Storage Unit Inspection Parameters and Schedule

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION

		FREQUENCY
Container Load/Unload Areas	• Damage to containers • Evidence of spills • Removal of used absorbent and cleaning materials	Daily Daily Daily
Container Storage Areas	• Evidence of spills on slab, ramps, drains, and sumps • Removal of used absorbent and cleaning materials • Cracks or gaps in base concrete, slab, sump, and drains • Corrosion of floors and grating over drains and sumps • Accessibility and operability of sump pumps • Condition and availability of overpack containers	Daily Daily Daily Weekly Daily Daily
Stored Containers	• Check for leaks and swelling • Proper placement • Adequacy of aisle space • Check that all containers (including roll-offs and LUGGER boxes) are tightly covered	Daily Daily Daily Daily
Safety & emergency response equipment & supplies	• Adequate supply present and it good condition	Daily & Weekly

4.3 CONTAINER DEPACK/REPACK/BULKING/DECANT UNIT INSPECTIONS

There are two (2) Container Depack/Repack/Bulking/Decant Units at Veolia – one handling material that is EPA-regulated RCRA waste (Depack East) and the other for primarily household regulated waste (Depack West). Activities at these locations primarily revolve around the consolidation of small volumes of material from small containers into larger container. From this point, materials are either sent for off-site treatment or are further consolidated into even larger containers (5,000-gallon tankers). Materials processed in these locations include a wide variety of hazard classes.

The possible problems which may lead to a release of waste materials or effect personnel health and safety at the Container Depack/Repack/Bulking/Decant Units include:

- Structural failure of secondary containment
- Malfunction of operating equipment such as pumps, pipes, hoses, conveyors, dust filters or fume removal fans

The elements and frequency of inspection for the facility's Container Depack/Repack/Bulking/Decant Units are summarized in Table 4-3 below.

Table 4-3

Container Depack/Repack/Bulking/Decant Unit Inspection Parameters and Schedule

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Tank Truck Load/Unload Areas	• Evidence of spills • Removal of used absorbent and cleaning materials • Check for cracks and damage to area • Inspect hoses, couplings, and valves for deterioration and leakage	Daily Daily Weekly Weekly
Interior of Process Units	• Evidence of spills • Cracks or gaps in base concrete and surrounding slab • Check for seepage outside of containment • Check for debris, clean-up residuals, improperly stored equipment	Daily Daily Weekly Daily
Container Staging	• Ensure containers are staged for <72 hours • Check that all containers are tightly covered • Check that all containers are in good condition • Containers are properly marked and labeled • Check for leaks, damage, or corrosion	Daily Daily Daily Daily
Safety & emergency response equipment & supplies	• Adequate supply present and it good condition	Daily & Weekly

4.4 WASTE STABILIZATION AND STORAGE BUILDING INSPECTION

The primary activity conducted in the Waste Stabilization and Storage Building is pit-stabilization of bulk solid, RCRA characteristic, metal-bearing wastes (waste codes D004 through D011). Specific treatment recipes are developed for each wastestream with primary reagents being portland cement, ferric chloride, and ferrous sulfate. Secondary activities in the area include container consolidation and container staging/storage for either continued treatment or transportation. Within the area, open waste containers may include a variety of waste classifications.

The potential problems at this process location which may lead to a release of waste materials or effect personnel health and safety within the Waste Stabilization and Storage Building include:

- Structural or operating equipment malfunctions
- Malfunction of the ventilation system
- Deterioration of equipment guarding
- Waste container failure

The elements and frequency of inspection for the facility's Waste Stabilization and Storage Building are summarized in Table 4-4.

Table 4-4

Waste Stabilization and Storage Building Inspection Parameters and Schedule

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Waste Loading & Unloading Areas	• Check for defective containers (including roll-offs and lugger boxes) • Check for evidence of spilled material on pad, berm,	Daily Daily

	and ramps	
Waste Process Areas	• Evidence of spilled material on the floor • Communication systems and alarms • Containment sumps for collected material • Ensure operating log is up to date • Crack in floor • Containment sumps for deterioration • Improperly stored equipment • Inspect pugmill and conveyors	Daily Daily Daily Daily Daily Weekly Weekly Weekly
Dry Waste Storage Silo	• Check for leaks • Check fill level • Inspect piping and seals • Inspect alarm • Inspect hose and coupling • Inspect exterior for cracks • Perform shell thickness testing • Inspect interior for corrosion and erosion	Daily Daily Weekly Daily Weekly Weekly Biennially Every five (5) years
Material Staging Areas	• Evidence of spilled materials • Containers properly labeled, closed, and stored • Adequate aisle space • Damage to containers	Daily Daily Daily Daily
Safety & emergency response equipment & supplies	• Reagent handled, labeled, and stored according to hazard class	Weekly

4.5 48 CONTAINER ROLL-OFF/LUGGER BOX STORAGE UNIT INSPECTION

The 48 Container Roll-off/Lugger Box Storage Unit is a RCRA-permitted storage location (one year maximum time on site) for the site's larger waste containers. To ensure waste containment in the event of a release, the container storage areas are include an impervious bottom surface and are bermed, include a sloped grade, or both. The unit also includes blinds cisterns and sumps that capture any liquid materials (waste or rainwater) for later processing.

The potential problems which may lead to release of waste constituents or affect personnel health and safety at the 48 Container Roll-off/Lugger Box Storage Unit include:

- Spills in the loading/unloading area
- Deteriorated, damaged, or leaking containers
- Failure or deterioration of secondary spill containment structures
- Improper placement of roll-off/Lugger box containers

The inspection procedures and appropriate schedules for the 48 Container Roll-off/Lugger Box Storage Units are shown in Table 4-5.

Table 4-5

48 Container Roll-off/Lugger Box Storage Unit Inspection Parameters and Schedule

EQUIPMENT	INSPECTION ELEMENT & ASSOCIATED PROBLEMS	INSPECTION FREQUENCY
Container Load/Unload Areas	• Damage to containers	Daily
	• Evidence of spills	Daily
	• Removal of used absorbent and cleaning materials	Daily
Container Storage Areas	• Evidence of spills on slab, ramps, drains, and sumps	Daily
	• Removal of used absorbent and cleaning materials	Daily
	• Cracks or gaps in base concrete, slab, sump, and drains	Daily
	• Corrosion of floors and grating over drains and sumps	Weekly
	• Accessibility and operability of sump pumps	Daily
Stored Containers	• Proper placement	Daily
	• Adequacy of aisle space	Daily
	• Check that all containers are tightly covered	Daily
Safety & emergency response equipment & supplies	• Adequate supply present and it good condition	Daily & Weekly

5.0 TANK WALL THICKNESS INSPECTION

Each tank that may contain hazardous wastes will be periodically inspected to determine if wall thinning, due to corrosion and erosion, has occurred. The frequency of this activity is specified in the process-specific inspection schedules contained in this plan.

Non-destructive tests such as ultrasound will be used to determine actual wall thickness. In so doing, there will be no need to remove the contents from the tank. Measurements will be taken in the following ways:

- Around the circumference, near the bottom of the tank, at radial locations: 0°, 90°, 180°, and 270°
- At each of the radial locations defined above, starting from the bottom and extending upwards, measurements will be taken, at minimum, at two (2) foot intervals
- No measurement will be taken at any seam

The data obtained will then be used to calculate the percentage of deterioration on the sidewalls. As a succession of periodic measurements is performed, the life of the tank can be forecast.

Since ultrasound or other external test techniques will be employed, it will not be necessary for anyone to enter tanks to determine tank wall thinning. When an internal inspection of the facility's tanks is required (e.g. when the ultrasound tests indicate unusual loss of shell thickness or abnormalities in shell material), these tanks must first be emptied using standard facility methods. These methods include unloading the contents into a bulk container or processing. Waste materials to be emptied will be verified to be compatible with the receiving container and the current or previous contents thereof.

6.0 PROCESS OPERATIONS PROCEDURES

Each movement of a waste within the facility during which any change to its characteristics may occur makes it subject to additional inspection, sampling, and analysis to determine appropriate handling and management. A majority of the analyses needed for the storage, treatment, and disposal functions are performed during incoming load verifications and post processing. There activities are not repeated unless it is known or believed that the waste characteristics may have changed during storage or processing.

Anticipated process operations at the facility for which current and periodic sampling and analyses may be necessary include the following:

- Storage
- Treatment (e.g. decanting into tankers and stabilization)

Before any wastes are placed into a storage or treatment unit, the site's Technical Manager will assess the compatibility of the wastes, the location's materials of construction, and with wastes already being processed.

6.1 WASTES IN CONTAINERS (DRUMS, LUGGER BOXES AND ROLL-OFFS)

Wastes stored in containers are segregated with respect to DOT hazard class and general chemical compatibility. The U.S. DOT Segregation Table for Hazardous Materials (49 CFR 177.848) shall be employed for the initial determination of compatibility. Using the predominant hazard classification of the incoming waste, the proper container storage location will be designated to insure separation from stored incompatible waste.

The following table lists hazard classes and their recognized incompatibilities.

Table 6-1

General Material Incompatibilities

HAZARD CLASS	INCOMPATIBLE HAZARD CLASS

Flammable Liquids	Oxidizers, Organic Peroxides
Flammable Solids	Corrosives, Oxidizers (aqueous-based)
Oxidizers, Organic Peroxides	Corrosives, Flammables
Corrosives	Oxidizers, Organic Peroxides, Flammable Solids

Based on the initial hazard determination and final verification of the waste, drummed wastes will be to address both DOT and general compatibility concerns. Roll-offs and lugger boxes generally contain toxic metal hazardous waste or corrosive solids and would typically be compatible without further segregation. Roll-offs can contain treatment residuals from the Waste Stabilization Process that typically are compatible with hazardous wastes placed in storage that will require further treatment or disposal at an off-site approved facility.

6.2 WASTES IN TANKS

Liquid wastes delivered in bulk form, tank trucks, or decanted from drums into tank trucks are temporarily stored on site prior to transfer off site for treatment. Prior to transferring any wastes into a tank truck, the compatibility of the waste with the material already in the tank will be determined by preliminarily screening using a chemical compatibility chart and actual compatibility testing.

The process operations of the facility are further addressed in Sections 4.0 and 7.0.

APPENDIX IPP-1

REMEDIAL WORK ORDER FORM

APPENDIX IPP-2

FACILITY DAILY AND WEEKLY INSPECTION REPORT FORMS

VEOLIA ES TECHNICAL SOLUTIONS L.L.C. – MENOMOMEE FALLS, WI
REMEDIAL WORK ORDER

RWO # _____

- REMEDIAL WORK ORDER Date: _____

  Corrective Action Assigned To: _____

  Unit Name: _____

  Location: _____

  Inspection Element/Type of Problem: _____

  Date of Inspection: _____

  Required Remedial Response: _____

  _____

  Work to be Completed by: _____

  Signature of Inspector: _____

- WORK COMPLETION RECORD

  Completed On: _____

  Signature of Employee: _____

- RE-INSPECTION REPORT

  Observations/Comments: _____

  _____

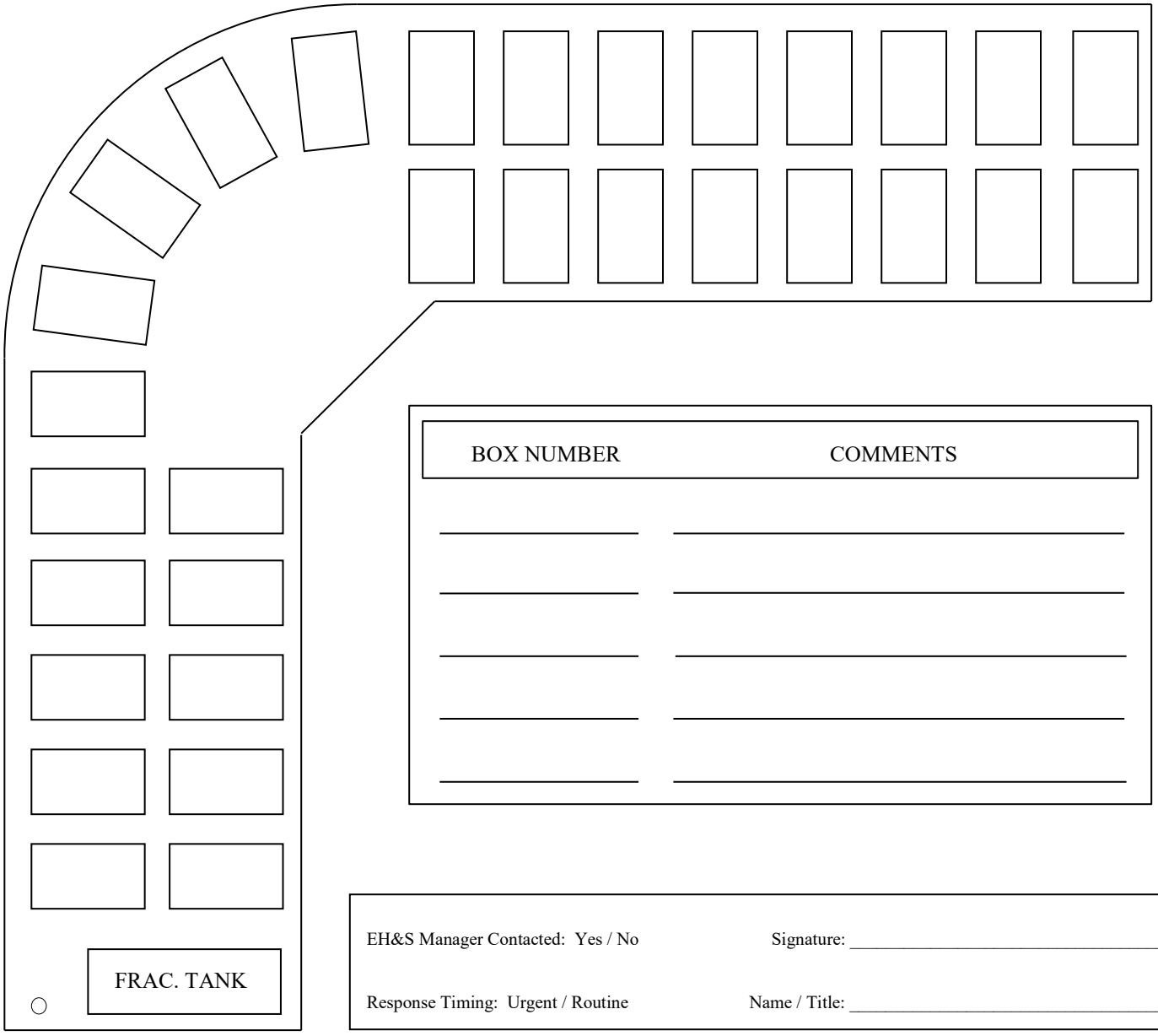
  Signature of Inspector: _____ Date: _____

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS, WI
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **90 Day Accumulation Area / RCRA Unit (Back Berm)**



BOX NUMBER	COMMENTS

EH&S Manager Contacted: Yes / No

Signature: _____

Response Timing: Urgent / Routine

Name / Title: _____

Equipment/Process Unit Name: **90 Day Accumulation Area / RCRA Unit (Back Berm)**

Did precipitation occur during the inspection day? Yes / No

Was precipitation transferred into frac./storage tank? Yes / No

If visible accumulation noted, time supervisor notified: ___ : ___AM / PM

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **90 Day Accumulation Area / RCRA Unit (Back Berm)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
STORED CONTAINERS	CHECK FOR PROPER PLACEMENT / AISLE SPACE			
	CHECK THAT CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE CLOSED UNLESS PROCESSING			
	CHECK THAT CONTAINERS ARE MARKED AND PROPERLY LABELED			
	TARPS IN GOOD CONDITION			
	STANDING WATER ON TARPS			
CONTAINER STORAGE AREAS	EVIDENCE AND PROMPT REMOVAL OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR CRACKS AND GAPS IN SLAB OR BERMS			
SAFETY EQUIPMENT	SAFETY EQUIPMENT READILY AVAILABLE			
	SPILL CLEAN-UP SUPPLIES READILY AVAILABLE			
HOUSEKEEPING	ORDERLY WORK AREA			
SITE EMERGENCY EXIT	ACCESSIBLE AND FUNCTIONING			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

STORED CONTAINERS:

Proper placement/aisle space:	Access to all sides of stored containers is not available to allow unobstructed movement of personnel, fire protection equipment or decontamination equipment in the event of an emergency. The presence of <18" of aisle space between containers is not maintained.
Good condition:	Dents, holes or other deterioration to stored containers that could result in a release.
Closed containers:	Stored containers found with uncovered waste or with other openings.
Properly marked/labeled:	Stored containers are not marked with the words "Hazardous Waste" or equivalent or without date of accumulation.
Tarps in good condition:	Tarps with significant rips or holes incapable of containing waste or preventing unwanted material from entering.
Standing water on tarps:	Significant amount of standing water present on tarps.

CONTAINER STORAGE AREAS:

Evidence of spilled materials:	Puddles or piles of residue on slab, containers, or berm.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Cracks/gaps in slab or berms:	Cracks, gaps, or other openings in slab or berm that could compromise the integrity of the containment system.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment [e.g. fire extinguishers, eye washes, safety showers] blocked by supplies or containers.
Spill cleanup supplies:	Spill clean-up supplies not available in the area.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

SITE EMERGENCY EXIT:

Accessible and functioning:	Door blocked by equipment, snow, grass, etc. Door locked or otherwise impeding egress from site.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Office Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SURVEILLANCE SYSTEM	CHECK OPERATION (CLOSED CIRCUIT TV, GATES, CONTROLLED ENTRIES)			
INTERNAL AND EXTERNAL COMMUNICATION SYSTEMS (PHONE)	CHECK ACCESSABILITY			
	CHECK FOR OPERATION			
HOUSEKEEPING	ORDERLY WORK AREA			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SURVEILLANCE SYSTEM:

Check for operation:	Monitors and associated equipment are not functioning, not providing clear pictures of the required surveillance areas, or are not recording. Gates are not functioning properly.

INTERNAL / EXTERNAL COMMUNICATION SYSTEMS (PHONE):

Accessibility and operation:	Phones are without power or will not operate.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present in hallways creating trip hazards or access to emergency meeting point and exits.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment [e.g. fire extinguishers, AED, first aid kit] blocked.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Laboratory / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
INTERNAL AND EXTERNAL COMMUNICATION SYSTEMS (PHONE)	CHECK FOR ACCESSABILITY			
	CHECK FOR OPERATION			
SAMPLE DISPOSAL SYSTEM	OBSERVE IF PROPER DISPOSAL PROCEDURES ARE IN USE			
	CHECK IF CONTAINERS ARE PROPERLY LABELED, CLOSED			
VENTILATION SYSTEM	CHECK OPERATION AND ADEQUACY OF FUME HOOD			
SAMPLING EQUIPMENT	PROPER PLACEMENT AND DECONTAMINATION OF REUSEABLE EQUIPMENT			
LAB WASTE MATERIALS	PLACED IN PROPER CONTAINERS, LABELED AND STORED			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES MAINTAINED			
HOUSEKEEPING	ORDERLY WORK AREA			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

INTERNAL / EXTERNAL COMMUNICATIONS (PHONE):

Accessibility and operation:	Phones are without power or are in disrepair.

SAMPLE DISPOSAL SYSTEM:

Proper disposal:	Disposable sampling materials not disposed of properly.
Properly marked/labeled:	Containers with material inside not marked with words "Hazardous Waste" or equivalent.

VENTILATION:

Hood operability & adequacy:	Hood fans that do not activate when switched on or hoods that do not exhibit adequate air flow. Hoods not flow tested annually or after being repaired. Hood lights not operating.

SAMPLING EQUIPMENT:

Proper placement & decon.:	Sampling equipment not stored in designated containers and areas. Sampling equipment not decontaminated after use. Sampling equipment open to cross-contamination.

LAB WASTE MATERIALS:

Proper placement:	Drums of discarded samples are not closed, labeled, or storage area is disorganized.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment [e.g. fire extinguishers, eye washes, safety showers] blocked by supplies or containers.
Exit routes:	A minimum of two (2) routes of escape from the work area are not maintained. Exit routes blocked or otherwise inaccessible.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on floor or walkways creating trip hazards.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Shop / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
HOUSEKEEPING	ORDERLY WORK AREA			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES ARE MAINTAINED			
FORKLIFT BATTERY CHARGER	IN GOOD OPERATING CONDITION			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Trip hazards are present. Aisles or fire exits are blocked. Spills or clean up materials on floors. Contamination within area or where it can be spread to other work areas.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment (e.g. fire extinguishers, eye washes, safety showers) blocked by supplies or containers.
Exit Routes:	A minimum of two (2) routes of escape from the work area are not maintained. Exit routes blocked or otherwise inaccessible.

BATTERY CHARGER:

Good Operating Condition:	Unit is in disrepair and access to safety station (eye wash) is prevented.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **HHW/VSQG Storage Area / non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
STORED CONTAINERS	CHECK FOR PROPER PLACEMENT / AISLE SPACE			
	CHECK THAT CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE CLOSED UNLESS PROCESSING			
	CHECK THAT CONTAINERS ARE MARKED AND PROPERLY LABELED			
	AVAILABILITY OF OVERPACKS			
CONTAINER STORAGE AREAS	EVIDENCE AND PROMPT REMOVAL OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR CRACKS AND GAPS IN SLAB OR BERMS			
SAFETY EQUIPMENT	SAFETY EQUIPMENT READILY AVAILABLE			
	SPILL CLEAN-UP SUPPLIES READILY AVAILABLE			
HOUSEKEEPING	ORDERLY WORK AREA			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
FIRE SUPPRESSION SYSTEM	EMERGENCY SHUT-OFF ACCESSIBLE			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

STORED CONTAINERS:

Proper placement/aisle space:	Access to all sides of stored containers is not available to allow unobstructed movement of personnel, fire protection equipment or decontamination equipment in the event of an emergency. The presence of <18" of aisle space between containers is not maintained.
Good condition:	Damage to stored waste containers [e.g. dents, holes, or other deterioration] that could result in a release.
Closed containers:	Stored containers found with uncovered waste or with other openings.
Properly marked/labeled:	Stored containers are not marked with the words "Hazardous Waste" or equivalent or without date of accumulation. Containers have proper storage labels.
Condition & availability of OPs:	Overpacks in unusable condition or an insufficient supply [less than five (5)].

CONTAINER STORAGE AREAS:

Evidence of spilled materials:	Puddles or piles of residue on slab, containers, or berm.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Cracks/gaps in slab or berms:	Cracks, gaps, or other openings in slab or berm that could compromise the integrity of the containment system.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment [e.g. fire extinguishers, eye washes, safety showers] blocked by supplies or containers.
Spill cleanup supplies:	Spill clean-up supplies not available in the area.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

FIRE SUPPRESSION SYSTEM:

Emergency shut-off accessible:	Shut-off cannot be accessed as needed.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Depack, Bulking, Repack, Decant / RCRA Unit (Depack East)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
TANK TRUCK LOAD/UNLOAD AREA	CHECK FOR PROMPT REMOVAL OF SPILLED MATERIAL FROM SLAB AND RAMP			
	CHECK FOR REMOVAL OF SPILL ABSORBENT AND CLEANUP MATERIALS			
INTERIOR OF DEPACK UNIT	EVIDENCE AND PROMPT REMOVAL OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR CRACKS AND GAPS IN SLAB OR BERMS			
	AVAILABLITIY OF OVERPACKS			
STAGED CONTAINERS	CHECK TO ENSURE CONTAINERS ARE STAGED FOR <72 HOURS			
	CHECK TO ENSURE ≤ 20 CONTAINERS IN STORAGE			
	CHECK TO ENSURE CONTAINERS ARE CLOSED			
	CHECK TO INSURE CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE PROPERLY MARKED/LABELED			
	CHECK FOR LEAKS			
	AISLE SPACE MAINTAINED			
	DISCREPANT CONTAINERS APPROPRIATELY MANAGED			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

TANK TRUCK LOADING/UNLOADING AREA:

Spilled materials:	Timely removal of puddles or piles of residue from asphalt or ramp.
Removal of clean-up materials:	Used absorbent or other cleaning materials on ground.

INTERIOR OF REPACK/BULKING/DECANT UNIT:

Evidence of spilled materials:	Puddles or piles of residue on slab, berm, or process equipment.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Cracks/gaps in slab or berms:	Cracks, gaps, or other openings in slab or berm that could compromise the integrity of the containment system.
Condition & availability of OPs:	Overpacks in unusable condition or an insufficient supply [less than five (5)].

STAGED CONTAINERS:

Containers staging:	Containers staged for more than 72 hours.
Number of containers:	Number in storage exceeds twenty (20) 55-gallon containers.
Closed containers:	Containers found with loose lids, without bungs, or found with other openings.
Containers in good condition:	Dents, holes or other deterioration to containers that could result in a release.
Properly marked/labeled:	Container not marked with words “Hazardous Waste” or equivalent and date of accumulation.
Leaks:	Evidence of waste released from containers into the unit.
Aisle space maintained:	Access to containers for inspection or spills not maintained [<18”].
Management of discrepancies:	Discrepant waste not in containment, segregated from incompatible materials, or packed in a timely manner.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Depack, Bulking, Repack, Decant / RCRA Unit (Depack East)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
AIR HANDLING EQUIPMENT	SCRUBBER SYSTEM			
	VENTILATION SYSTEM			
HOUSEKEEPING	ORDERLY WORK AREA			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES MAINTAINED			
	WARNING STROBES WORKING & USED PROPERLY			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
SPILL EQUIPMENT & SUPPLIES	AVAILABLE & IN ADEQUATE SUPPLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

AIR HANDLING EQUIPMENT:

Scrubber system:	Unit in alarm or operating out of limits.
Ventilation system:	Restricted air flow. Carbon coming out of stack. Unit making uncharacteristic sounds. Overhead doors open during operation/processing.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment (e.g. fire extinguishers, eye washes, safety showers) blocked by supplies or containers.
Exit routes:	A minimum of two (2) routes of escape from the work area are not maintained. Exit routes blocked or otherwise inaccessible.
Warning strobes:	Strobe lights inoperable. Strobe lights off with open containers in the process area.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

SPILL EQUIPMENT & SUPPLIES:

Available & in adequate supply:	Absorbent, shovels, brooms, overpacks and other spill containment & clean-up items not immediately available.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Non-Hazardous Waste Processing Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
INTERNAL AND EXTERNAL COMMUNICATION SYSTEMS (PHONE)	CHECK FOR ACCESSIBILITY			
	CHECK FOR OPERATION			
SAMPLE DISPOSAL SYSTEM	OBSERVE IF PROPER DISPOSAL PROCEDURES ARE IN USE			
SAMPLING	CHECK FOR PROPER HANDLING OF SAMPLING EQUIPMENT & SAMPLES			
VENTILATION	CHECK FOR OPERATION			
CONTAINER LOAD/UNLOAD AREAS	CHECK FOR DAMAGE TO CONTAINERS			
	CHECK FOR EVIDENCE OF SPILLED MATERIALS ON FLOOR			
	CHECK FOR REMOVAL OF USED ABSORBENT AND CLEANING MATERIALS			
	CHECK FOR ACCESSIBILITY AND OPERATION OF SUMPS			
	CHECK FOR PROMPT CONTAINER REMOVAL FROM RECEIVING AREA			
	TRAILERS HAVE WHEELS CHOCKED AND JACK STANDS			
CONTAINER STORAGE AREAS (BUILDING AND TRAILERS)	CHECK FOR EVIDENCE OF SPILLED MATERIALS ON FLOOR/ASPHALT			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEAN-UP MATERIALS			
STORED CONTAINERS	CHECK FOR DRUM LEAKS AND SWELLING			
	CHECK THAT ALL CONTAINERS ARE COVERED			
	FLAMMABLES & REACTIVES STORED PROPERLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

INTERNAL / EXTERNAL COMMUNICATION SYSTEMS (PHONES):

Accessibility and operation:	Phones are without power or will not operate.

SAMPLE DISPOSAL SYSTEM:

Proper disposal procedures:	Sampling debris not properly contained.

SAMPLING:

Handling of equipment/samples:	Sampling equipment not stored in designated containers and kept free from contamination. Samples not closed, clean, or properly labeled.

VENTILATION:

Operation:	Ventilation fans will not activate when switched on or do not create adequate air flow.

CONTAINER LOAD/UNLOAD AREAS:

Damage to containers:	Dents, holes, or other deterioration to waste containers that could result in a release.
Evidence of spills:	Evidence of waste residues on floor.
Removal of clean-up materials:	Used absorbent or other cleaning material on floor.
Sump accessibility & operation:	Visible accumulation in sumps.
Container removal:	Containers left in the loading/unloading areas other than during operations.
Trailer safety:	Trailers entered with forklift are not chocked. Trailers without tractors missing jack stands.

CONTAINER STORAGE AREAS (BUILDING AND TRAILERS):

Evidence of spilled materials:	Evidence of waste residues on floor.
Removal of clean-up materials:	Used absorbent or other cleaning materials on floor.

STORED CONTAINERS:

Check for leaks/swelling:	Containers with leaks or swelling or other conditions that could result in a release of the contents from the container.
Covered containers:	Container found without covers, without bungs, or found with other openings.
Flammable & reactive storage:	Containers with ignitable or reactive materials <50’ from property line.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Non-Hazardous Waste Processing Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SAFETY EQUIPMENT	WARNING STROBES WORKING & USED PROPERLY			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
HOUSEKEEPING	ORDERLY WORK AREA			
CONSOLIDATION ROLLOFF CONTAINERS	CHECK FOR DAMAGE TO CONTAINERS			
	CHECK THAT ALL CONTAINERS ARE COVERED			
	TARPS IN GOOD CONDITION			
CONSOLIDATION ROLLOFF CONTAINER STORAGE AREA	CHECK FOR EVIDENCE OF SPILLED MATERIALS ON ASPHALT			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEAN-UP MATERIALS			
SITE EMERGENCY EXIT	ACCESSIBLE AND FUNCTIONING			
SPILL EQUIPMENT & SUPPLIES	AVAILABLE & IN ADEQUATE SUPPLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SAFETY EQUIPMENT:

Warning strobes:	Strobe lights inoperable. Strobe lights off with open containers in the process area.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on floor or walkways creating trip hazards.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

CONSOLIDATION CONTAINERS:

Damage to Containers:	Containers incapable of effectively holding contents.
Containers Covered:	Containers open without material being either added or removed.
Tarps in good condition:	Tarps with significant rips or holes incapable of containing waste or preventing unwanted material from entering. Significant amount of standing water present on tarps.

CONSOLIDATION CONTAINER STORAGE AREA:

Evidence of spilled material:	Material out of containers and on asphalt.
Removal of clean-up materials:	Absorbent and other clean-up debris on asphalt after spill clean-up activities are complete.

SITE EMERGENCY EXIT:

Accessible and functioning:	Door blocked by equipment, snow, grass, etc. Door locked or otherwise impeding egress from site.

SPILL EQUIPMENT & SUPPLIES:

Available & in adequate supply:	Absorbent, shovels, brooms, overpacks and other spill containment & clean-up items not immediately available.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **HHW Depack, Bulking, Repack, Decant / non-RCRA Unit (Depack West)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ROLL-OFF STORAGE AREA	CHECK FOR EVIDENCE OF SPILLS			
	CHECK FOR REMOVAL OF SPILL ABSORBENT AND CLEANUP MATERIALS			
INTERIOR OF DEPACK UNIT	EVIDENCE AND PROMPT REMOVAL OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR CRACKS AND GAPS IN SLAB OR BERMS			
	AVAILABLITIY OF OVERPACKS			
STAGED CONTAINERS	CHECK TO ENSURE CONTAINERS IN STORAGE DO NOT EXCEED 20			
	CHECK TO ENSURE CONTAINERS ARE CLOSED			
	CHECK TO INSURE CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE PROPERLY MARKED/LABELED			
	CHECK FOR ADEQUATE AISLE SPACE			
HOUSEKEEPING	ORDERLY WORK AREA			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES MAINTAINED			
	WARNING STROBES WORKING & USED PROPERLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ROLL-OFF STORAGE AREA:

Evidence of spilled materials:	Puddles or piles of residue on asphalt or on side of waste container.
Removal of clean-up materials:	Used absorbent or other cleaning materials on ground.

INTERIOR OF REPACK/BULKING/DECANT UNIT:

Evidence of spilled materials:	Puddles or piles of residue on slab, berm, or process equipment.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Cracks/gaps in slab or berms:	Cracks, gaps, or other openings in slab or berm that could compromise the integrity of the containment system.
Condition & availability of OPs:	Overpacks in unusable condition or an insufficient supply [less than five (5)].

STAGED CONTAINERS:

Number of containers:	Number in storage exceeds twenty (20) 55-gallon containers.
Containers covered tightly:	Containers not closed except during material addition or removal. Containers found with loose lids or other covering devices that are not secure.
Containers in good condition:	Damage to waste containers [e.g. dents, holes, or other deterioration] that could result in a release.
Proper marks & labels:	Containers have proper storage labels.
Adequate aisle space:	Containers not placed on racks.
Damage to containers:	Dents, holes, or other deterioration to waste containers that could result in a release.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment (e.g. fire extinguishers, eye washes, safety showers) blocked by supplies or containers.
Exit routes:	A minimum of two (2) routes of escape from the work area are not maintained.
Warning strobes:	Strobe lights inoperable. Strobe lights off with open containers in the process area.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **HHW Depack, Bulking, Repack, Decant / non-RCRA Unit (Depack West)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
STAGED CONTAINER	CHECK FOR LEAKS			
	DISCREPANT CONTAINERS APPROPRIATELY MANAGED			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
ASBESTOS ACCUMULATION AREA	AREA PROPERLY MAINTAINED			
SPILL EQUIPMENT & SUPPLIES	AVAILABLE & IN ADEQUATE SUPPLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

STAGED CONTAINERS:

Leaks:	Evidence of waste released from containers into the unit.
Management of discrepancies:	Discrepant waste not in containment, segregated from incompatible materials, or packed in a timely manner.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

ASBESTOS ACCUMULATION AREA:

Area properly maintained:	Storage containers improperly marked/labeled. Rolloff or tarps in bad condition. Containers open.

SPILL EQUIPMENT & SUPPLIES:

Available & in adequate supply:	Absorbent, shovels, brooms, overpacks and other spill containment & clean-up items not immediately available.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **800 Container Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
INTERNAL AND EXTERNAL COMMUNICATION SYSTEMS (PHONE)	CHECK FOR ACCESSIBILITY			
	CHECK FOR OPERATION			
SAMPLE DISPOSAL SYSTEM	OBSERVE IF PROPER DISPOSAL PROCEDURES ARE IN USE			
SAMPLING	CHECK FOR PROPER HANDLING OF SAMPLING EQUIPMENT & SAMPLES			
VENTILATION	CHECK FOR OPERATION			
CONTAINER LOAD/UNLOAD AREAS	INSURE CONTAINERS ARE IN GOOD CONDITION			
	CHECK FOR EVIDENCE OF SPILLED MATERIALS ON FLOOR			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIALS			
	CHECK FOR PROMPT CONTAINER REMOVAL FROM RECEIVING AREA			
	CHECK FOR ACCESSIBILITY AND OPERATION OF SUMP			
	TRAILERS HAVE WHEELS CHOCKED AND JACK STANDS			
HOUSEKEEPING	ORDERLY WORK AREA			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES MAINTAINED			
	WARNING STROBES WORKING & USED PROPERLY			
	EXITS DOORS ACCESSIBLE & FUNCTIONING			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

INTERNAL / EXTERNAL COMMUNICATION SYSTEMS (PHONES):

Accessibility and operation:	Phones are without power or will not operate.

SAMPLE DISPOSAL SYSTEM:

Proper disposal procedures:	Sampling debris not properly contained. Samples collected for analysis found in the building at any time other than during a sampling event. Drums of discarded samples not closed; containers without labels.

SAMPLING:

Handling of equipment/samples:	Sampling equipment not stored in designated containers and kept free from contamination. Samples not closed, clean, or properly labeled.

VENTILATION:

Operation:	Check alarm in PPE room.

CONTAINER LOAD/UNLOAD AREAS:

Containers in good condition:	Damage to waste containers [e.g. dents, holes, or other deterioration] that could result in a material release.
Evidence of spills:	Evidence of waste residues on floor.
Removal of clean-up materials:	Used absorbent or other cleaning material on floor.
Container removal:	Containers left in the loading/unloading areas other than during these operations.
Sump accessibility & operation:	Visible accumulation in sumps.
Trailer safety:	Trailers entered with forklift are not chocked. Trailers without tractors missing jack stands.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations, are trip hazards, or block aisles or fire exits. Spills or clean up materials on floor.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment (e.g. fire extinguishers, eye washes, safety showers) blocked by supplies or containers.
Exit routes:	A minimum of two (2) routes of escape from the work area are not maintained.
Warning strobes:	Strobe lights inoperable. Strobe lights off with open containers in the process area.
Exit doors accessible/functioning:	Door blocked by equipment, snow, grass, etc. Door locked or otherwise impeding egress from building.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **800 Container Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE AREAS	CHECK FOR EVIDENCE OF SPILLED MATERIALS ON SLAB, RAMPS, AND SUMPS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIALS			
	CHECK FOR ACCESSIBILITY AND OPERATION OF SUMPS			
	CHECK CONDITION AND AVAILIBILITY OF OVERPACK CONTAINERS			
	CHECK FOR CRACKS AND GAPS IN SLAB, BERMS, AND SUMP			
STORED CONTAINERS	CHECK FOR DRUM LEAKS AND SWELLING			
	CHECK FOR PROPER PLACEMENT/STACKING			
	CHECK FOR ADEQUATE AISLE SPACE			
	CHECK THAT ALL CONTAINERS ARE TIGHTLY COVERED**			
	INSURE CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE PROPERLY MARKED & LABELED			
FIRE SUPPRESSION SYSTEM	ENSURE RISER ROOM IS ADEQUATELY HEATED			
	INSPECT CLEARANCE AT SPRINKLER HEADS			
	EMERGENCY SHUT-OFF ACCESSIBLE			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
SPILL EQUIPMENT & SUPPLIES	AVAILABLE & IN ADEQUATE SUPPLY			

**Where applicable container complies with Subpart CC requirements.

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of spilled materials:	Puddles or piles of residue on slab, ramps, and sumps.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Sump accessibility & operation:	Visible accumulation in sumps.
Condition / availability of OPs:	Overpacks in unusable condition or of insufficient supply [< five (5)].
Cracks / gaps in storage area:	Cracks, gaps, or other openings in slab, berms, and sump that could compromise the integrity of the containment system.

STORED CONTAINERS:

Drum leaks and swelling:	Containers with leaks or swelling or other conditions that could result in a release of the contents from the container.
Proper placement and stacking:	Containers not located in the proper area as indicated by signage. Containers stacked more than two high, a large container over a small one, or container edges overhanging off of a pallet or shelf. Cylinders unsecured.
Adequate aisle space:	Containers not placed on racks.
Containers covered tightly:	Containers not closed except during material addition or removal. Containers found with loose lids or other covering devices that are not secure.
Containers in good condition:	Damage to waste containers [e.g. dents, holes, or other deterioration] that could result in a material release.
Containers marked/labeled:	Containers do not have proper storage labels and receipt dates.

FIRE SUPPRESSION SYSTEM:

Riser room sufficiently heated:	Riser room temperature below 50° F. Space heater not available or in disrepair.
Sprinkler head clearance:	Minimum vertical clearance between sprinklers and material below is <18".
Emergency shut-off accessible:	Shut-off cannot be accessed as needed.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

SPILL EQUIPMENT & SUPPLIES:

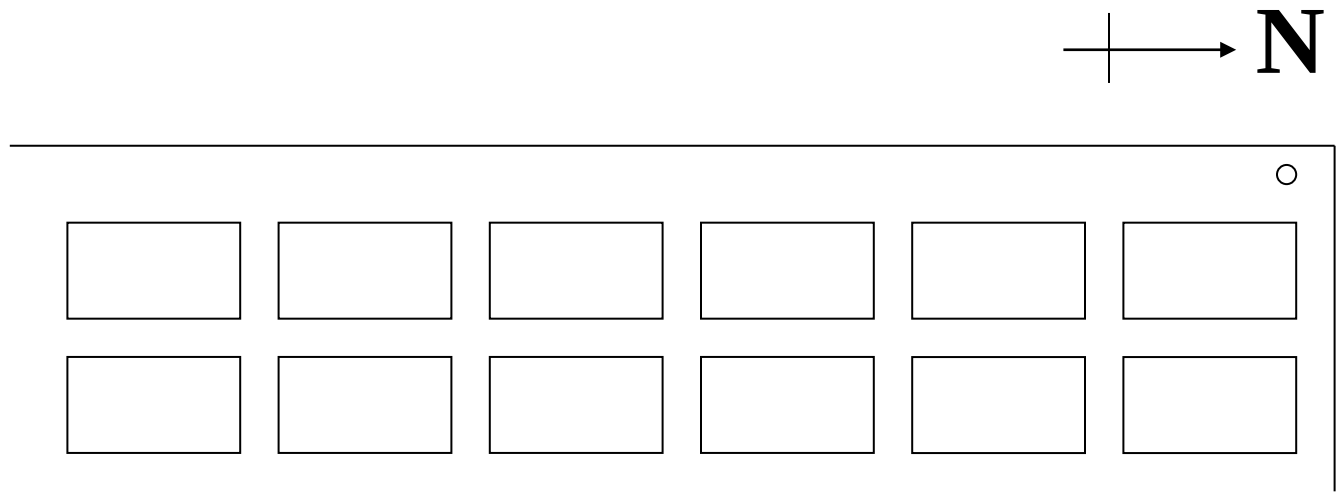
Available & in adequate supply:	Absorbent, shovels, brooms, overpacks and other spill containment & clean-up items not immediately available.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS, WI
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **90 Day Accumulation Area / RCRA Unit (Stab. Berm)**



BOX NUMBER	COMMENTS

EH&S Manager Contacted: Yes / No

Signature: _____

Response Timing: Urgent / Routine

Name / Title: _____

Equipment/Process Unit Name: **90 Day Accumulation Area / RCRA Unit (Stab. Berm)**

Did precipitation occur during the inspection day?	Yes / No
Does accumulated precipitation need to be removed?	Yes / No
If visible accumulation noted, time supervisor notified:	___ : ___AM / PM

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **90-Day Accumulation Area / RCRA Unit (Stab. Berm)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
STORED CONTAINERS	CHECK FOR PROPER PLACEMENT / AISLE SPACE			
	CHECK THAT CONTAINERS ARE IN GOOD CONDITION			
	CHECK THAT CONTAINERS ARE CLOSED UNLESS PROCESSING			
	CHECK THAT CONTAINERS ARE MARKED AND PROPERLY LABELED			
	TARPS IN GOOD CONDITION			
CONTAINER STORAGE AREAS	EVIDENCE AND PROMPT REMOVAL OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR CRACKS AND GAPS IN SLAB OR BERMS			
SAFETY EQUIPMENT	SAFETY EQUIPMENT READILY AVAILABLE			
	SPILL CLEAN-UP SUPPLIES READILY AVAILABLE			
HOUSEKEEPING	ORDERLY WORK AREA			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

STORED CONTAINERS:

Proper placement/aisle space:	Access to all sides of stored containers is not available to allow unobstructed movement of personnel, fire protection equipment or decontamination equipment in the event of an emergency. The presence of <18" of aisle space between containers is not maintained.
Good condition:	Dents, holes or other deterioration to stored containers that could result in a release.
Closed containers:	Stored containers found with uncovered waste or with other openings.
Properly marked/labeled:	Stored containers are not marked with the words "Hazardous Waste" or equivalent or without date of accumulation.
Tarps in good condition:	Tarps with significant rips or holes incapable of containing waste or preventing unwanted material from entering. Significant amount of standing water present on tarps.

CONTAINER STORAGE AREAS:

Evidence of spilled materials:	Puddles or piles of residue on slab, containers, or berm.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Cracks/gaps in slab or berms:	Cracks, gaps, or other openings in slab or berm that could compromise the integrity of the containment system.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment [e.g. fire extinguishers, eye washes, safety showers] blocked by supplies or containers.
Spill cleanup supplies:	Spill clean-up supplies not available in the area.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Waste Stabilization & Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ALARM SYSTEMS	CHECK ACCESSABILITY			
INTERNAL AND EXTERNAL COMMUNICATION SYSTEMS (PHONE)	CHECK ACCESSABILITY			
	CHECK FOR OPERATION			
WASTE CONTAINERS	CHECK FOR DAMAGE TO CONTAINERS / ROLLOFFS			
	CHECK FOR EVIDENCE OF SPILLED MATERIAL			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEAN-UP MATERIALS			
	ROLLOFFS AND OTHER CONTAINERS PROPERLY MARKED & LABELED			
CONTAINER LOAD/UNLOAD AREA	CHECK FOR PROMPT REMOVAL OF CONTAINERS FROM AREA			
	TRAILERS HAVE WHEELS CHOCKED AND JACK STANDS			
INBOUND / OUTBOUND STAGING AREA	CHECK FOR DAMAGE TO CONTAINERS/ROLL-OFFS			
	CHECK FOR EVIDENCE OF SPILLED MATERIALS			
	CHECK FOR CRACKS OR GAPS IN SLAB, BERMS, OR ASPHALT			
	CHECK FOR ADEQUATE AISLE SPACE/PROPER PLACEMENT			
	CHECK FOR PROMPT REMOVAL OF CONTAINERS FROM AREA			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ALARM SYSTEMS:

Accessibility/operation:	Access to the fire (5/at exit doors) or evacuation (1/control room) alarms are blocked or alarm does not sound.

INTERNAL / EXTERNAL COMMUNICATION SYSTEMS (PHONE):

Accessibility/operation:	Phones are blocked, are without power, or will not operate.

WASTE CONTAINERS:

Damage to containers:	Integrity of containers/roll-offs that could result in release of material [e.g. holes], insecurely fastened tailgates, uncovered containers, tarps with rips/tears.
Evidence of spilled materials:	Evidence of residue in loading/unloading area.
Removal of absorbent:	Used absorbent or other cleaning materials in unloading/loading area.
Properly marked & labeled:	Containers missing appropriate labels or other required markings. No “Hazardous Waste Label” or “Hazardous Waste Label” without EPA hazardous waste codes and accumulation start date.

CONTAINER LOAD/UNLOAD AREAS:

Prompt removal of containers:	Containers left in the receiving area other than during loading/unloading operation.
Trailer safety:	Trailers entered with forklift are not chocked. Trailers without tractors missing jack stands.

INBOUND/OUTBOUND CONTAINER STAGING AREA:

Damage to containers:	Integrity of containers/roll-offs that could result in release of material [e.g. holes], insecurely fastened tailgates, uncovered containers, tarps with rips/tears.
Evidence of spilled materials:	Evidence of residue in staging area.
Cracks/gaps:	Cracks, gaps or other opening in slab, berms, or asphalt that could compromise the integrity of the containment building.
Adequate aisle space/placement:	Containers that are placed closer than the 3’ aisle space minimum (all 4 sides). Access to all sides of stored containers is not available to allow for unobstructed inspection or movement of personnel, fire protection equipment or decontamination equipment in the event of an emergency or spill.
Prompt removal of containers:	Containers left in the staging area other than during staging operation.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **Waste Stabilization & Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SECONDARY CONTAINMENT SUMPS	CHECK FOR COLLECTED MATERIAL			
DRY WASTE STORAGE SILO	CHECK OVERFILL CONTROL EQUIPMENT			
	CHECK FOR RELEASE OF WASTE REAGENT (LEAKS IN SILO)			
	CHECK FILL LEVEL			
	INSPECT ALARM			
PROCESS AREA	CHECK FOR SPILLED MATERIAL ON FLOOR			
	CHECK OPERATING LOG (CURRENT)			
	CHECK TO INSURE SWEPT CLEAN DAILY			
SAFETY EQUIPMENT	ACCESSIBILITIY OF SAFETY EQUIPMENT			
	EXIT ROUTES MAINTAINED			
	PIT GUARDING			
	WARNING STROBES WORKING & USED PROPERLY			
SECONDARY CONTAINMENT STRUCTURE	CHECK FOR CRACKS OR CORROSION			
HOUSEKEEPING	ORDERLY WORK AREA			
PERSONAL PROTECTIVE EQUIPMENT	PROPER USAGE AND MANAGEMENT			
SPILL EQUIPMENT & SUPPLIES	AVAILABLE & IN ADEQUATE SUPPLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SECONDARY CONTAINER SUMPS:

Containment Sump:	Material in sump.

DRY WASTE STORAGE SILO:

Overfill control equipment:	Fill level indicators that are not functioning properly.
Release of Reagent:	Silos that have cracks, gaps, or deformities that could compromise the integrity of the tank.
Check fill level:	Fill levels in excess of 95% (red).
Inspect alarm:	Audible and visual alarms and their backups not functioning properly.

PROCESS AREA:

Spilled material:	Evidence of hazardous waste residues on floor or outside of spill pans.
Operating log:	Operating log that does not reflect most recent processing.
Swept clean daily:	Housekeeping that does not remove debris daily.

SAFETY EQUIPMENT:

Accessibility of Equipment:	Safety equipment e.g. fire extinguishers, eye washes, safety showers) blocked by supplies or containers.
Exit routes:	A minimum of two (2) routes of escape from the work area are not maintained.
Pit Guarding:	Pit guarding not installed unless material is being added to or removed from pit. Pit guarding is damaged.
Warning strobes:	Strobe lights inoperable. Strobe lights off with open containers in the process area.

SECONDARY CONTAINMENT STRUCTURE:

Cracks/corrosion:	Cracks, corrosion or other opening in the floor or walls that could compromise the integrity of the containment building.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations. Debris present on ground creating trip hazards or potential hazards to process equipment.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Proper use & management:	Required PPE not available or being used as needed. PPE not disposed of properly.

SPILL EQUIPMENT & SUPPLIES:

Available & in adequate supply:	Absorbent, shovels, brooms, overpacks and other spill containment & clean-up items not immediately available.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
DAILY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM / PM

Equipment/Process Unit Name: **48 Container Roll-off & Lugger box Storage Area / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER LOAD/UNLOAD AREAS	CHECK FOR DAMAGE TO CONTAINERS			
	CHECK FOR EVIDENCE OF SPILLED MATERIALS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIALS			
	CHECK FOR PROMPT MATERIAL RECEIPT			
CONTAINER STORAGE AREAS	CHECK FOR PROMPT REMOVAL OF SPILLED MATERIAL FROM SLAB, RAMPS, AND SUMPS			
	CHECK FOR REMOVAL OF ABSORBENT AND CLEANUP MATERIAL			
	CHECK FOR ACCESSIBILITY AND OPERATION OF SUMPS			
	CHECK FOR CRACKS AND GAPS IN SLAB, BERMS, SUMPS, AND DRAINS			
STORED CONTAINERS	CHECK THAT ALL CONTAINERS ARE TIGHTLY COVERED			
	CHECK FOR PROPER PLACEMENT			
	CHECK FOR DRUM LEAKS AND SWELLING			
	CHECK FOR DAMAGE TO CONTAINERS			
	TARPS IN GOOD CONDITION			
HOUSEKEEPING	ORDERLY WORK AREA			
SITE EMERGENCY EXIT	ACCESSIBLE AND FUNCTIONING			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER LOAD/UNLOAD AREAS:

Damage to containers:	Dents, holes, or other deterioration to waste containers that could result in a release.
Evidence of spilled materials:	Puddles or piles of waste material in or around containers [roll-offs, luggers or trailers].
Removal of clean-up materials:	Used absorbent or other cleaning materials in area.
Container removal:	Containers left in the receiving area for >48 hours.

CONTAINER STORAGE AREAS:

Spilled materials:	Timely removal of puddles or piles of residue on slab, ramps, and sumps.
Removal of clean-up materials:	Used absorbent or other cleaning materials in storage area.
Sump accessibility & operation:	Visible accumulation in sumps. Sump pumps not available or inoperable.
Cracks/gaps in slab or sumps:	Cracks, gaps, or other openings in slab or sumps that could compromise the integrity of the containment system.

STORED CONTAINERS:

Containers covered tightly:	Containers found with loose lids (tarps), or other covering devices that are not secure, or tarps with tears, rips or holes in them.
Proper placement:	Access to all sides of stored containers is not available.
Drum leaks and swelling:	Containers with leaks or swelling or other conditions that could result in a release of the contents from the container.
Damage to containers:	Dents, holes, or other deterioration to waste containers that could result in a release.
Tarps in good condition:	Tarps with significant rips or holes incapable of containing waste or preventing unwanted material from entering. Significant amount of standing water present on tarps.

HOUSEKEEPING:

Orderly Work Area:	Supplies and equipment are not in their proper locations, are trip hazards, or block aisles or fire exits. Debris present on ground creating trip hazards or potential hazards to process equipment.

SITE EMERGENCY EXIT:

Accessible and functioning:	Door blocked by equipment, snow, grass, etc. Door locked or otherwise impeding egress from site.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS

COMMENTS / RWO SUMMARY SECTION

Date: ___ / ___ / ___

FACILITY AREA	RWO #	COMMENTS
Note: Describe deficiencies in detail. Create RWO if issue requires extended follow-up.		

If an RWO is created, please complete the following:

- ☐ Copies (2) made.
- ☐ Original to area manager responsible for RWO resolution.
- ☐ Copy 1 to Daily Inspection binder preceding this Daily Inspection Report.
- ☐ Copy 2 to Inspection clipboard.

If previous RWO(s) is/are still unresolved [are found on Inspection Clipboard], follow up with specified area manager.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Waste Stabilization & Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO INSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
PPE & RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRST AID KIT	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRE BLANKET	CHECK ACCESSIBILITY			
EMERGENCY EYE WASH/SHOWER	CHECK ACCESSIBILITY AND ACTIVATE UNIT – SHUT OFF PROPERLY			
MISC. EMERGENCY & DECONTAMINATION EQUIPMENT	CHECK ACCESSIBILITY AND AVAILABILITY			
BACKHOE PAD TRACK AREAS	CHECK FOR DAMAGE TO CONCRETE PLATFORM			
WATER LINES	CHECK FOR ADEQUATE PRESSURE / LEAKS			
SITE EXIT GATES	CHECK OPERABILITY			
	CHECK FOR GATE LOCK FUNCTION			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

FIRE BLANKET:

Accessibility:	Blanket is blocked or missing.

EMERGENCY SHOWER AND EYEWASH STATION:

Accessibility:	Unit is blocked.
Activate unit:	Waster does not flow adequately or drips after turning off.

MISC. EMERGENCY AND DECONTAMINATION EQUIPMENT:

Accessibility & supply:	Equipment such as brooms, absorbent, brushes, water, pumps, etc. must be available in area.

BACKHOE PAD TRACK AREA:

Damage:	Pad surface must be free of cracks, large chips or deterioration.

WATER LINES:

Adequate pressure:	Water is not flowing at a normal pressure and rate.

SITE EXIT GATES:

Operability:	Gates are not opening or closing properly.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Waste Stabilization & Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
PROCESS AREA	CHECK CONTAINMENT SUMPS FOR DETERIORATION			
	CHECK FOR IMPROPERLY STORED EQUIPMENT			
	CHECK FLOOR FOR CRACKS			
	INSPECT PUGMILL AND CONVEYORS			
DRY WASTE STORAGE SILO	INSPECT PIPING			
	INSPECT SEAL			
	INSPECT HOSE AND COUPLING			
	INSPECT EXTERIOR FOR CRACKS			
ALARM SYSTEM	CHECK ACCESSIBILITY			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXIT SIGNS	ALL IN WORKING ORDER			
AREA SPILL KIT	ACCESSIBLE & STOCKED			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

PROCESS AREA:

Sump cracks/corrosion:	Cracks, corrosion or other openings in the floor that could compromise the integrity of the containment building.
Equipment cracks/corrosion:	Equipment placed in areas restricting personnel movement or vulnerable to damage.
Floor:	Cracks, gaps or other openings in slab, berms, or asphalt that could compromise the integrity of the containment building.
Pugmill, conveyors:	Pugmill or screw conveyors in disrepair.

DRY WASTE STORAGE SILO:

Piping:	Cracks, gaps, wear, that could compromise piping integrity.
Seal hose coupling:	Material seeping from seals, hoses between silo and conveyor, conveyor and pugmill.

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

SPILL KIT:

Accessible & stocked:	Area spill kit blocked by equipment or snow. Kit is insufficiently supplied.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **800 Container Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ALARM SYSTEM	CHECK ACCESSABILITY			
FIRE EXTINGUISHERS	CHECK ACCESSABILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
FIRE BLANKET	CHECK ACCESSABILITY			
OTHER EMERGENCY AND DECONTAMINATION EQUIPMENT	CHECK ACCESSABILITY			
PPE AND RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRST AID KIT	CHECK ACCESSABILITY			
EMERGENCY EYE WASH AND SHOWER	CHECK ACCESSABILITY			
	ACTIVATE UNIT & SHUT OFF PROPERLY			
SAMPLING EQUIPMENT	CHECK FOR PROPER PLACEMENT AND PROPER DECONTAMINATION			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure Gauge:	Needle is outside of full range on dial.
Inspection Tag:	Tag is missing or is not indicating an annual inspection was done.

FIRE BLANKET:

Accessibility:	Blanket is blocked or missing.

MISC. EMERGENCY AND DECONTAMINATION EQUIPMENT:

Accessibility:	Equipment such as brooms, absorbent, brushes, water, pumps, etc. must be available in area.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

EMERGENCY SHOWER AND EYEWASH STATION:

Accessibility:	Unit is blocked.
Activate Unit:	Water does not flow adequately or drips after turning off.

SAMPLING EQUIPMENT:

Proper placement, decontamination:	Sampling equipment not stored in designated containers. Reusable equipment not stored properly, disposable equipment not disposed of properly.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **800 Container Storage Building / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE AREA	CHECK FOR CORROSION OF FLOORS AND GRATING OVER SUMPS AND DRAINS			
FIRE SUPPRESSION SYSTEM	VISUALLY INSPECT MAIN SPRINKLER VALVE TO ENSURE IT IS IN OPEN POSITION			
EXIT SIGNS	VISUALLY INSPECT TO ENSURE ALL ARE IN WORKING ORDER – EACH DOOR			
EMERGENCY LIGHTING	CHECK OPERABILITY			
WATER LINES	CHECK FOR ADEQUATE PRESSURE			
DEA CAGE & SAFES	STRUCTURALLY SOUND			
AREA SPILL KIT	ACCESSIBLE & STOCKED			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps or other openings in slab, berms, sumps and drains that could compromise the integrity of the containment system.

FIRE SUPPRESSION SYSTEM:

Valve inspection:	Large round valve at front of system must be turned to open position (see arrow).

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

WATER LINES:

Adequate pressure:	Water is not flowing at a normal pressure and rate.

DEA CAGE & SAFES:

Structurally sound:	Alarm systems inoperable. Units allow unsecured access.

SPILL KIT:

Accessible & stocked:	Area spill kit blocked by equipment or snow. Kit is insufficiently supplied.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Office Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ALARM SYSTEMS	CHECK ACCESSABILITY			
FIRE EXTINGUISHERS	CHECK ACCESSABILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTIION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
FIRE BLAKETS	CHECK ACCESSIBILITY			
FIRST AID KIT	CHECK ACCESSIBILITY			
WATER LINES	CHECK FOR ADEQUATE PRESSURE			
GATES	CHECK OPERABILITY			
	CHECK FOR GATE LOCK FUNCTION			
EMERGENCY LIGHTING	CHECK OPERABILITY			
	CHECK BATTERY POWER			
EXIT SIGNS	ALL IN WORKING ORDER			
AED	IN WORKING ORDER			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

FIRE BLANKET:

Accessibility:	Blanket is blocked or missing.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

WATER LINES:

Adequate pressure:	Water is not flowing at a normal pressure and rate.

GATES:

Operability:	Gates are not opening or closing properly.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

AED:

Working order:	Unit is present and in operating condition.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **48 Container Roll-off/Luger Box Storage Area / RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
CONTAINER STORAGE AREAS	CHECK FOR DAMAGE TO SLAB			
	CHECK FOR DAMAGE TO BERMS, BOX STOPS, AND GRATING			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is no indicating an annual inspection was done.

CONTAINER STORAGE AREAS:

Slab damage:	Cracks, gaps or other openings in slab, sumps and drains that could compromise the integrity of the containment system.
Box stops & sump grating:	Box stops/grating unable to perform necessary functions.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **90-Day Accumulation Area / RCRA Unit (Stab. Berm)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE	CHECK FOR EVIDENCE OF LEAKAGE			
	CHECK FOR CORROSION OR DETERIORATION OF CONTAINERS			
	CHECK FOR CORROSION OR DETERIORATION OF THE DISCHARGE CONFINEMENT STRUCTURES (DIKES)			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of leakage:	Puddles or piles of residue on slab, ramps, drains and sumps.
Corrosion/Deterioration of containers:	Holes, rust, dents, or bulging in containers.
Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps or other openings in slab, erms, sumps and drains that could compromise the integrity of the containment system.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Depack, Bulking, Repack, Decant / RCRA Unit (Depack East)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
TANK TRUCK LOADING/UNLOADING AREA	CHECK CURBS AND AREA FOR CRACKS, DAMAGE.			
	INSPECT HOSES FOR DETERIORATION OR LEAKAGE			
	INSPECT HOSE COUPLINGS AND VALVES FOR DETERIORATION OR LEAKAGE			
INTERIOR OF REPACK/BULKING/ DECANT UNIT	CHECK FOR EVIDENCE OF SEEPAGE OUTSIDE CONTAINMENT (E.G., DISCOLORATION)			
CONTAINER STAGING	CHECK FOR DAMAGE CORROSION			
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of leakage:	Puddles or piles of residue on slab, ramps, drains and sumps.
Corrosion/Deterioration of containers:	Holes, rust, dents, or bulging in containers.
Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps or other openings in slab, berms, sumps and drains that could compromise the integrity of the containment system.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure Gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Depack, Bulking, Repack, Decant / RCRA Unit (Depack East)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
EYEWASH/SHOWER	CHECK ACCESSIBILITY			
	ACTIVATE UNIT AND SHUT OFF PROPERLY			
ALARM SYSTEM	CHECK ASSESSIBILITY			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXITS SIGNS	CHECK FOR OPERABILITY			
AREA SPILL KIT	ACCESSIBLE & STOCKED			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

EMERGRNCY EYEWASH/SHOWER:

Accessibility:	Unit is blocked.
Activate unit:	Water does not flow adequately or drips after turning off.

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

SPILL KIT:

Accessible & stocked:	Area spill kit blocked by equipment or snow. Kit is insufficiently supplied.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Non-Hazardous Waste Processing Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ALARM SYSTEMS	CHECK ACCESSABILITY			
FIRE EXTINGUISHERS	CHECK ACCESSABILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
FIRE BLANKET	CHECK ACCESSIBILITY			
MISC. EMERGENCY & DECONTAMINATION EQUIPMENT	CHECK ACCESSIBILITY			
PPE & RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRST AID KIT	CHECK ACCESSIBILITY			
EMERGENCY EYE WASH STATION	CHECK ACCESSIBILITY			
	ACTIVATE UNIT & SHUT OFF PROPERLY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked
Seal:	Plastic seal around trigger is broken or missing.
Pressure gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

FIRE BLANKET:

Accessibility:	Blanket is blocked or missing.

MISC. EMERGENCY AND DECONTAMINATION EQUIPMENT:

Accessibility:	Equipment such as brooms, absorbent, brushes, water, pumps, etc. must be available in area.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

EMERGENCY SHOWER AND EYEWASH STATION:

Accessibility:	Unit is blocked.
Activate unit:	Water does not flow adequately or drips after turning off.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Non-Hazardous Waste Processing Building / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SAMPLING EQUIPMENT	CHECK FOR PROPER PLACEMENT			
	CHECK FOR PROPER DECONTAMINATION			
CONTAINER STORAGE AREAS	CHECK FOR CORROSION OF FLOORS DRAINS AND SUMPS			
WATER LINES	CHECK FOR ADEQUATE PRESSURE			
EMERGENCY LIGHTING	CHECK OPERABILITY			
EXIT SIGNS	ALL IN WORKING ORDER			
AREA SPILL KIT	ACCESSIBLE & STOCKED			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SAMPLING EQUIPMENT:

Proper placement, decontamination: Sampling equipment not stored in designated containers. Reusable equipment not stored properly, disposable equipment not disposed of properly.

CONTAINER STORAGE AREAS:

Cracks/gaps in slab, berms, sumps & drains: Cracks, gaps or other openings in slab, berms sumps and drains that could compromise the integrity of the containment system.

WATER LINES:

Adequate pressure: Water is not flowing at a normal pressure and rate.

EMERGENCY LIGHTING:

Operability/battery power: Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order: Signs are not illuminating or a bulb is missing.

SPILL KIT:

Accessible & stocked: Area spill kit blocked by equipment or snow. Kit is insufficiently supplied.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **90-Day Accumulation Area / RCRA Unit (Stab. Berm)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE	CHECK FOR EVIDENCE OF LEAKAGE			
	CHECK FOR CORROSION OR DETERIORATION OF THE CONTAINERS			
	CHECK FOR CORRISON OR DETERIORATION OF THE DISCHARGE CONFINEMENT STRUCTURES(DIKES)			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of leakage:	Puddles or piles of residue on slab, ramps, drains and sumps.
Corrosion/Deterioration of containers:	Holes, rust, dents, or bulging in containers.
Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps, or other openings in slab, berms, sumps and drains that could compromise the integrity of the containment system.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Laboratory / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
ALARM SYSTEMS	CHECK ACCESSIBILITY			
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
FIRE BLANKET	CHECK ACCESSIBILITY			
PPE AND RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRST AID KIT	CHECK ACCESSIBILITY			
EMERGENCY SHOWER AND EYE WASH STATION	CHECK ACCESSIBILITY			
	ACTIVATE UNIT & SHUT OFF PROPERLY			
WATER LINES	CHECK FOR ADEQUATE PRESSURE			
VENTILATION	CHECK OPERATION OF HOODS			
REAGENTS	LABELED/STORED PROPERLY ACCORDING TO HAZARD CLASS			
EXIT SIGNS	ALL IN WORKING ORDER			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broke or missing.
Pressure gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

FIRE BLANKET:

Accessibility:	Blanket is blocked or missing.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

EMERGENCY SHOWER AND EYEWASH STATION:

Accessibility:	Unit is blocked.
Activate unit:	Water does not flow adequately or drips after turning off.

WATER LINES:

Adequate pressure:	Water is not flowing at a normal pressure and rate.

VENTILATION:

Hood operability & adequacy:	Hood fans that do not activate when switched on, or hoods that do not exhibit adequate air flow.

REAGENTS:

Handled/stores properly:	Reagents are stored incompatibly or are left unsecured.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **Laboratory / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SAMPLE STORAGE	STORED PROPERLY & SAFELY			
	FLAMMABLE IN FLAMMABLE STORAGE AREA			
	ACIDS IN CORROSION RESISTANT CABINET			
	STORAGE ROOM CLEAN, ORDERLY, WELL LIT			
	INCOMPATIBLE MATERIALS STORED SEPARATELY			
HOOD SYSTEM	CHECK CAPABILITY OF CONTAINING MINOR SPILLS			
ABSORBENT SUPPLY	ADEQUATE SUPPLY TO ABSORB SPILLS			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXIT SIGNS	IN WORKING ORDER			
SAMPLING RACK	IN WORKING ORDER			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SAMPLE STORAGE:

Stored properly:	Unacceptable Condition: Samples are stored incompatibly or are not secured.
Flammables:	Unacceptability Condition: Flammables not stored in certified cabinets.
Housekeeping:	Unacceptable Condition: Samples strewn around and room is in disorderly condition.

ABSORPTION SUPPLY:

Supply adequate:	At least one (1) bag of absorbent is not available and kept in the area.

HOOD SYSTEM:

Capable of containing minor spills:	Acceptable Condition: Clean absorbent pads on working surface.

EMERGENCY LIGHTING

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

SAMPLING RACK:

Working order:	In good repair. Safety equipment is in place.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___: ___ AM/PM

Equipment/Process Unit Name: **Shop / Non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
FIRE EXTINGUISHER	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
FIRE BLANKET	CHECK ACCESSIBILITY			
PPE AND RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRST AID KIT	CHECK ACCESSIBILITY			
EMERGENCY EYE WASH/SHOWER	CHECK ACCESSIBILITY			
	ACTIVATE UNIT & SHUT OFF PROPERLY			
WATER LINES	CHECK FOR ADEQUATE PRESSURE			
ABSORBENT SUPPLY	CHECK ACCESSIBILITY			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXIT SIGNS	ALL IN WORKING ORDER			
ALARM SYSTEMS	CHECK ACCESSIBILITY			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Unacceptable Condition: Plastic seal around trigger is broken or missing.
Pressure gauge:	Unacceptable Condition: Needle is outside of full range on dial.
Inspection tag:	Unacceptable Condition: Tag is missing or is not indicating an annual inspection was done.

FIRE BLANKET:

Accessibility:	PPE and respirators are not available to area personnel.

FIRST AID KIT:

Accessibility:	Unit is blocked or missing.

EMERGENCY SHOWER AND EYEWASH STATION:

Accessibility:	Unit is blocked.
Activate unit:	Water does not flow adequately or drips after off.

WATER LINES:

Adequate pressure:	Water is not flowing at a normal pressure and rate.

ABSORBENT SUPPLY:

Supply adequate:	At least one (1) bag of absorbent is not available and kept in area.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

ALARM SYSTEMS:

Accessibility:	Access to the alarm switch is blocked.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **HHW/VSQG Storage Area / non-RCRA Unit**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE	CHECK FOR EVIDENCE OF LEAKAGE			
	CHECK FOR CORROSION OR DETERIORATION OF THE CONTAINERS			
PPE & RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
EMERGENCY EYEWASH/SHOWER	CHECK ACCESSIBILITYAND ACTIVATE UNIT & SHUT OFF PROPERLY			
ALARM SYSTEM	CHECK ACCESSIBILITY			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXIT SIGNS	ALL IN WORKING ORDER			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of leakage:	Puddles or piles of residue on slab, ramps, drains and sumps.
Corrosion/Deterioration of containers:	Holes, rust, dents, or bulging in containers.
Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps or other openings in slab, berms, sumps and drains that could compromise the integrity of the containment system.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure Gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

EMERGENCY EYEWASH/SHOWER:

Accessibility:	Unit is blocked
Activate Unit:	Water does not flow adequately or drips after turning.

ALARM SYSTEM:

Accessibility:	Access to the alarm switch is blocked.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **HHW Depack, Bulking, Repack / non-RCRA Unit (Depack West)**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
CONTAINER STORAGE	CHECK FOR EVIDENCE OF LEAKAGE			
	CHECK FOR CORROSION OR DETERIORATION OF THE CONTAINERS			
PPE & RESPIRATORY PROTECTION	CHECK ACCESSIBILITY AND AVAILABILITY			
FIRE EXTINGUISHERS	CHECK ACCESSIBILITY			
	CHECK SEAL TO ENSURE EXTINGUISHER HAS NOT BEEN USED			
	CHECK PRESSURE GAUGE FOR FULL CHARGE			
	CHECK INSPECTION TAGS FOR ANNUAL MAINTENANCE BY OUTSIDE FIRE SERVICE			
EMERGENCY EYEWASH/SHOWER	CHECK ACCESSIBILITYAND ACTIVATE UNIT & SHUT OFF PROPERLY			
ALARM SYSTEM	CHECK ACCESSIBILITY			
EMERGENCY LIGHTING	CHECK FOR OPERABILITY			
EXIT SIGNS	ALL IN WORKING ORDER			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

CONTAINER STORAGE AREAS:

Evidence of leakage:	Puddles or piles of residue on slab, ramps, drains and sumps.
Corrosion/Deterioration of containers:	Holes, rust, dents, or bulging in containers.
Cracks/gaps in slab, berms, sumps & drains:	Cracks, gaps or other openings in slab, berms, sumps and drains that could compromise the integrity of the containment system.

PPE AND RESPIRATORY PROTECTION:

Accessibility:	PPE and respirators are not available to area personnel.

FIRE EXTINGUISHERS:

Accessibility:	Extinguisher is blocked.
Seal:	Plastic seal around trigger is broken or missing.
Pressure Gauge:	Needle is outside of full range on dial.
Inspection tag:	Tag is missing or is not indicating an annual inspection was done.

EMERGENCY EYEWASH/SHOWER:

Accessibility:	Unit is blocked
Activate Unit:	Water does not flow adequately or drips after turning.

ALARM SYSTEM:

Accessibility:	Access to the alarm switch is blocked.

EMERGENCY LIGHTING:

Operability/battery power:	Light does not illuminate when test button is pushed.

EXIT SIGNS:

Working order:	Signs are not illuminated or a bulb is missing.

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.
MENOMONEE FALLS
WEEKLY INSPECTION REPORT

Date of inspection: ___ / ___ / ___

Time of inspection: ___ : ___ AM/PM

Equipment/Process Unit Name: **General Facility**

INSPECTION CHECKLIST

EQUIPMENT STRUCTURE ITEM	INSPECTION ELEMENT	ACCEPTABLE	UNACCEPTABLE	IF UNACCEPTABLE SPECIFY REASON
SITE FENCELINE	INSPECT PERIMETER FOR DAMAGE & BREACHES			
	PRESENCE OF WARNING SIGNS			

EH&S Manager Contacted: Yes / No Signature: _____

Response Timing: Urgent / Routine Name / Title: _____

UNACCEPTABLE CONDITIONS

SITE FENCELINE:

Damage and breaches:	The 6’ height is not maintained due to damage or gaps. Vegetation effecting site security.
Presence of warning signs:	Warning signs not secured every 50’.

A p p e n d i x B

Air Pollution Control Permit

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

Air Pollution Control Permit Number: ROP-A03
Air Pollution Control Permit Number RCP-A03

AIR POLLUTION CONTROL
TYPE A
REGISTRATION OPERATION PERMIT (ROP)

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code, the permittee granted coverage under this permit is authorized to operate a direct stationary source in conformity with the conditions herein.

AND TYPE A REGISTRATION CONSTRUCTION PERMIT (RCP)

AUTHORIZATION TO MODIFY A SOURCE UNDER THIS PERMIT EXPIRES WHEN THE REGISTRATION OPERATION PERMIT IS ISSUED FOR THE EMISSION UNITS INCLUDED IN THIS PERMIT. NOTWITHSTANDING THE FACT THAT AUTHORIZATION TO MODIFY A SOURCE EXPIRES, ALL CONDITIONS IN THIS CONSTRUCTION PERMIT ARE PERMANENT UNLESS THEY ARE REVISED THROUGH REVISION OF THE REGISTRATION CONSTRUCTION PERMIT OR THROUGH ISSUANCE OF A NEW CONSTRUCTION PERMIT.

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code, the owner or operator granted coverage under this permit is authorized to modify and to initially operate a stationary source in conformity with the conditions herein

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in this permit.

Dated at Madison, Wisconsin, 04-16-09

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By Andrew M Stewart

Andrew M. Stewart
Chief, Permits and Stationary Source Modeling Section

Registration Permit Contents, Glossary of Terms, and Other Useful Information

Table of Contents

Glossary of Terms Used in This Permit and Other Useful Information

Annual maximum controlled emissions of particulate matter - For the purposes of this permit, the annual maximum controlled emissions of particulate matter are the maximum hourly emissions of particulate matter calculated using the control efficiencies listed in this permit, if control equipment is used, multiplied by 8760 hours per year for all emissions sources (except emission units listed in Attachment 2 of this permit) emitting particulate matter at the facility. If the emission unit's physical design makes it impossible to operate 8760 hours per year, the annual maximum controlled emissions may be calculated taking time restrictions into account.

Facility-wide annual actual emissions – For the purposes of this permit, facility-wide annual actual emissions are the total emissions generated by all emission sources (except emission units listed in Attachment 2 of this permit) at the facility over the calendar year taking into account any reductions made by a control device or technique. When considering reductions made by a control device, only the control devices and control device efficiencies listed in this permit may be used.

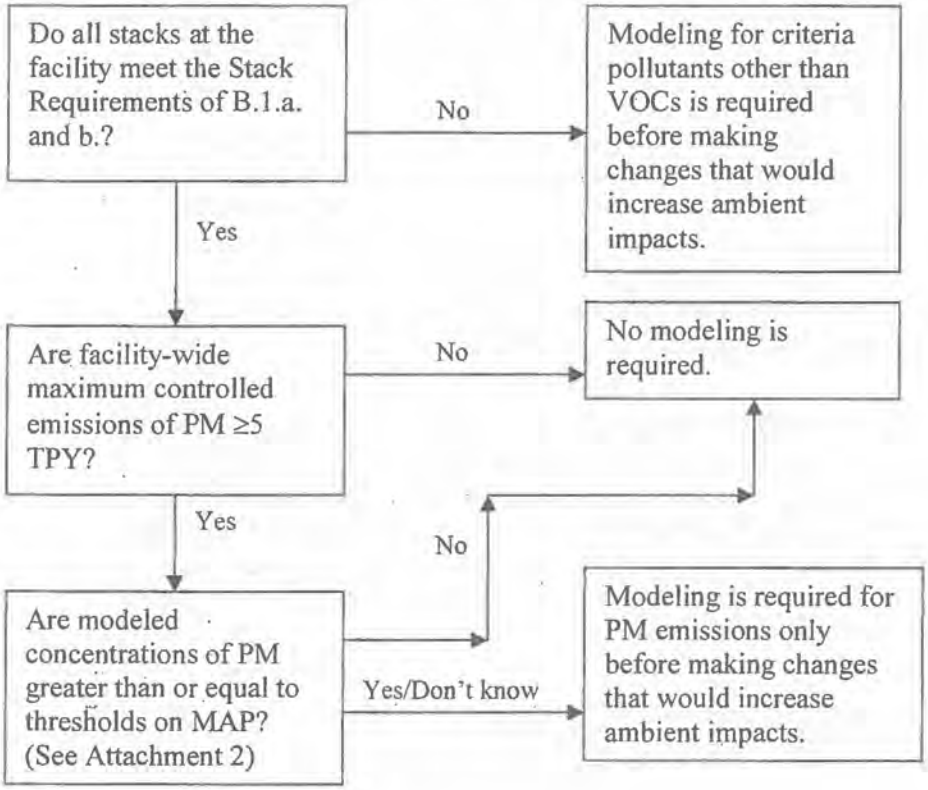
Hazardous air pollutants or contaminants are those regulated by s. 112(b) of the Clean Air Act and ch. NR 445, Wis. Adm. Code. Hazardous air contaminants regulated by the Clean Air Act are listed in Attachment 1 of this permit.

Photochemically Reactive Organic Compounds are defined in s. NR 419.02(14), Wis. Adm. Code, as any of the following: Group A: Hydrocarbons, alcohols, aldehydes, esters, ethers or ketones, which have olefinic or cyclo-olefinic type unsaturation. Group B: Aromatic compounds with 8 or more carbon atoms to the molecule, except ethylbenzene. Group C: Ethylbenzene, toluene or ketones having branched hydrocarbon structures. Group D: A solvent or mixture of organic compounds in which any of the following conditions are met: 1. More than 20% of the total volume is composed of any combination of compounds listed in group A, B, or C above. 2. More than 5% of the total volume is composed of any combination of the compounds listed in group A above. 3. More than 8% of the total volume is composed of any combination of the compounds listed in group B above.

Portable source is a facility, installation, operation or equipment that emits air pollution only while at a fixed location but is capable of being transported to a different location. A portable source is a type of direct stationary source. Examples include asphalt plants. An automobile is NOT a portable source.

Volatile Organic Compounds or VOC is defined in s. NR 400.02(162),, Wis. Adm. Code, and means any organic compound which participates in atmospheric photochemical reactions. This includes any such organic compound other than those listed in s. NR 400.02(162), Wis. Adm. Code.

Flow Chart for Determining Whether Modeling is Required under Section B.3 and 4. of the ROP



Abbreviations

BACT – Best Available Control Technology
HAP – Hazardous Air Pollutant or Contaminant
GACT – Generally Available Control Technology
LACT – Latest Available Control Technique and Operating Practices Demonstrating Best Current Technology
LAER – Lowest Achievable Emission Rate
MACT – Maximum Achievable Control Technology
MSDS – Material Safety Data Sheet
NESHAP - National Emission Standard for Hazardous Air Pollutants
NSPS – New Source Performance Standard
PHAP – Hazardous Air Pollutant emitted as a particle
PM – Particulate Matter
PM10 – Particulate Matter less than 10 microns in diameter
ROP – Registration Operation Permit
RCP – Registration Construction Permit
VHAP – Hazardous Air Pollutant emitted as a vapor
VOC – Volatile Organic Compounds
Wis. Adm. Code – Wisconsin Administrative Code
Wis. Stats. – Wisconsin Statutes

A. EMISSION LIMITATIONS

All facilities covered by this permit must meet the following emission limitations in A.1. and A.2.:

1. Facility-Wide Annual Actual Emission Limits:

The annual actual emissions of particulate matter, volatile organic compounds, nitrogen oxides, sulfur dioxide, carbon monoxide, and federally regulated hazardous air pollutants listed in s. 112(b) of the Clean Air Act, emitted from the facility may not exceed 25% of any major source threshold set forth in s. NR 407.02(4), Wis. Adm. Code, on a calendar year basis. Annual actual emissions of lead from the facility may not exceed 0.5 tons per year on a calendar year basis. See the note and Table 1 below for the annual actual emission limits in tons per year calculated based on 25% of the major source thresholds. [s. 285.65(7) and (14), Wis. Stats., and s. NR 407.105(2)(a)1., Wis. Adm. Code]

Note: Major source thresholds vary according to the attainment status of the area in which the facility is located. Therefore, if there is a change in the attainment status of the area where the facility is located for any pollutant, then the annual actual facility-wide emission limits will also change to 25% of the new major source threshold for that pollutant. Table 1 is for informational purposes only. The ton per year numbers will change if there is a change in the definition of major source or if new nonattainment areas are created or if the attainment designations change. These thresholds were current as of April 10, 2009.

Table 1 Emission Limits in Tons Per Year

Pollutant	Emission Limits
Particulate Matter Emissions	• 25 ton/year for particulate matter attainment areas • 17.5 ton/year for serious PM_{10} nonattainment areas
Volatile Organic Compounds (VOCs)	• 25 ton/year for ozone attainment and basic, marginal or moderate ozone nonattainment areas • 12.5 ton/year for serious ozone nonattainment or areas within ozone transport regions except for any severe or extreme nonattainment area for ozone • 6.25 ton/year for severe ozone nonattainment areas
Nitrogen Oxides	• 25 ton/year for ozone attainment and basic, marginal or moderate ozone nonattainment areas • 12.5 ton/year for serious ozone nonattainment or areas within ozone transport regions except for any severe or extreme nonattainment area for ozone • 6.25 ton/year for severe ozone nonattainment areas
Sulfur Dioxide	• 25 ton/year •
Carbon Monoxide	• 25 ton/year for attainment and moderate carbon monoxide nonattainment areas
Lead	• 0.5 tons/year
Section 112(b) Hazardous Air Pollutants (HAPs)	• 2.5 ton/year for any *single* pollutant • 6.25 ton/year for a *combination* of all pollutants

A. EMISSION LIMITATIONS

2. Other Applicable Requirements:

The owner or operator shall comply with all applicable air pollution control requirements in ch. 285, Wis. Stats., and chs. NR 400 to NR 499, Wis. Adm. Code, and all applicable federal air pollution control requirements in the Clean Air Act (42 USC 7401 to 7671q) and 40 CFR parts 50 to 97. [s. 285.65(3) and (13),Wis. Stats.]

Facilities that emit organic compounds *may* need to meet the following requirements.

3. Organic Compound Limitations for Process Lines:

For any process line that emits organic compounds, and which is not exempt under s. NR 424.03(1), Wis. Adm. Code, the owner or operator shall meet the requirements of s. NR 424.03(2) or (3), Wis. Adm. Code, by doing one of the following:

a. Apply 85% control as applicable in (1) or (2) below:

(1) For a process line constructed or last modified before August 1, 1979, control photochemically reactive organic compound emissions from the process line by at least 85%.

(2) For a process line constructed or last modified on or after August 1, 1979, control volatile organic compound emissions from the process line by at least 85%.

b. In-lieu of A.3.a. above, apply latest available control techniques and operating practices demonstrating best current technology (LACT) for the process line as described in A.4 through 6. of this permit. The LACT as described in this permit shall be followed at all times the process line is operating[1].

c. If a surface coating or printing process line meets the specific applicability[2] requirements in any section from ss. NR 422.05 to 422.155, Wis. Adm. Code, but is not subject to that section based on an exemption in s. NR 422.03, Wis. Adm. Code, the owner or operator may elect to meet the emission limitations in ss. NR 422.05 to 422.155 for the process line instead of meeting a. or b., above after submitting a written request to the Department and receiving approval from the Department to do so. [ss. NR 407.105(1)(c) and NR 424.03(2) and (3), Wis. Adm. Code.]

Requirements A. 4. through A.6. apply to each process line for which the owner or operator elected to apply LACT under condition A.3.b

4. Emission Limitation for all process lines, other than hot mix asphalt plants electing LACT:

a. The owner or operator shall limit emissions of photochemically reactive organic compounds to less than 10 tons per calendar year for each process line on which construction or modification last commenced prior to August 1, 1979; and

b. The owner or operator shall limit emissions of volatile organic compounds to less than 10 tons per calendar year for each process line on which construction or modification commenced on or after August 1, 1979. [ss. NR 407.105(1)(c), Wis. Adm. Code, and 285.65(7), Wis. Stats.]

c. By March 1 of each year, the owner or operator shall calculate the amount of photochemically reactive organic compounds or volatile organic compounds as appropriate, emitted by each process line subject to LACT, for the previous calendar year. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

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[1] These limits are necessary to ensure that 85% control is technologically infeasible allowing the option to comply with LACT. These emission caps apply only to the process line and do not excuse the facility from having to meet the facility-wide VOC limits in condition A.1.

[2] Geographic location or emission rates are not considered in determining if a process line meets the specific applicability requirements. The intention is to allow facilities that are in the same industrial group as those for which the section was written to use the conditions in that section.

A. EMISSION LIMITATIONS

5. Coating Process Line LACT:

a. In addition to complying with A.4., LACT for a coating process line has been determined to be use of high transfer application techniques including: electrostatic spray, dip coating or low pressure spray methods such as high volume low pressure (HVLP).[ss. NR 407.105(1)(c) and NR 424.03(2)(c), Wis. Adm. Code.]

b. The owner or operator of a coating process line subject to 5.a. above shall keep on site, plans, technical drawings or manufacturer's specifications of the coating operation that are adequate to show the coating technique that is used. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

6. Department Approved LACT for Hot-Mix Asphalt Plants:

a. Each year, within 30 days of the onset of hot mix production, and after that point, once within 20,000 tons of every additional 100,000 tons of hot mix production, a burner check shall be performed to determine the optimum levels[3] of the following parameters:

(1) Carbon monoxide (CO) and oxygen (O_2) levels in the drum, using a portable combustion analyzer, corresponding to burner operation in the most efficient manner, where the test port is located in the drum between the burner and the hot mix asphalt line, at the knock-out box, or in the duct-work after the drum;

(2) Draft pressure levels at the front of the drum to assure the most efficient burner operation, measured by means of a pressure gauge (i.e., photohelic gauge) or other type of controller that controls a variable damper located in front of or behind the induced draft fan;

(3) The following liquid fuel viscosity and gaseous fuel pressure and fuel feed conditions:

(i) Liquid fuel temperature for each liquid fuel;

(ii) Pump pressure for each liquid fuel; and

(iii) Gaseous fuel pressure.

b. The hot mix asphalt plant shall undergo a minimum of one burner check annually unless a written waiver is obtained from the Department.

c. The owner or operator shall perform weekly inspections to ensure that the plant drum has tightly sealing drum end seals and duct work which keep air in-leakage to a minimum.

d. The owner or operator shall maintain records of the optimum levels of the parameters in Condition A.6.a., of this permit.

e. The owner or operator shall maintain records of the burner checks and weekly inspections required under Conditions A.6.b. and A.6.c., of this permit. These records shall include the date of each action.

[ss. NR 407.105(1)(c) and NR 424.03(2)(c), Wis. Adm. Code.]

[3] The levels determined in this condition must follow the requirements as described in s. NR 439.055(3), Wis. Adm. Code. In this context, the optimum levels and most efficient burner operation is intended to provide a combustion environment which reduces or minimizes the emissions of organic compounds (i.e. products of incomplete combustion). Carbon monoxide (CO) and oxygen (O_2) measurements provided a surrogate for the emissions of organic compounds. Reductions of the CO concentration without excessive oxygen dilution (minimum CO emissions) usually corresponds to efficient fuel utilization and a reduction in the emissions of organic compounds.

B. STACK AND MODELING REQUIREMENTS

1. Stack Requirements for stacks emitting particulate matter sulfur dioxide, nitrogen oxides, carbon monoxide, and lead:[4]:

Except as provided in B.2., the following requirements apply to all stacks at the facility except those stacks serving emissions units listed in Attachment 1, and stacks serving exclusively as general building ventilation:

a. Stack vented emissions from a facility covered by this permit shall be exhausted from unobstructed discharge points that are within 10 degrees of vertical. [s. NR 407.105(2)(a)2, Wis. Adm. Code.]

b. Stacks at a facility covered by this permit shall be taller than any building that influences the dispersion of emissions from the stack. A building is considered to influence the dispersion of emissions from a stack if it is located within a circle around the building, the radius of which is 5 times the height of the building. [s. NR 407.105(2)(a)3, Wis. Adm. Code.]

2. Alternative to Stack Requirements:

In lieu of meeting the requirements of B.1. the owner or operator may instead demonstrate through air dispersion modeling that emissions from all of the facility's stacks, except those stacks serving emissions units listed in Attachment 1, and stacks serving exclusively as general building ventilation, do not and will not cause or exacerbate a violation of an air quality standard for the following air contaminants emitted by the facility: particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide and lead. [s. NR 407.105(2)(a)4, Wis. Adm. Code.]

The modeling requirements in B. 3. and B.4. only apply when making changes at your facility after your facility is covered under this ROP.

3. Modeling requirements for changes at facilities that meet the stack requirements in B.1.:

a. Except as provided in B.3.b., the owner or operator shall demonstrate through an air dispersion modeling analysis that the facility's emissions will not cause or exacerbate a violation of the particulate matter standard prior to making any of the following changes at the facility:

(1) Adding a new stack or emissions unit that will emit particulate matter.

(2) Making physical changes to an existing stack that would allow for an increase in the ambient impact of particulate matter.

(3) Making operational changes that would increase the maximum controlled emission rate of particulate matter.

b. Modeling is not required prior to making a change under B.3.a., if either of the following conditions are met:

(1) The facility-wide maximum controlled emissions of particulate matter will be less than 5 tons per year.

(2) Previous modeling showed ambient air concentrations of particulate matter at levels that were lower than the modeling thresholds in Attachment 2.

[4] The stack and modeling requirements for hazardous air contaminants are contained in ch. NR 445, Wis. Adm. Code. All facilities covered by this permit must meet the applicable requirements of ch. NR 445, Wis. Adm. Code, in addition to the requirements of this section.

B. STACK AND MODELING REQUIREMENTS

Notes:

- The modeling thresholds on the map in Attachment 2 may be updated in the future. Updates to the modeling threshold map will be posted at http://dnr.wi.gov/air/permits/streamlining/regpermits.html
- Stacks venting emission units listed in Attachment 1 and stacks that serve exclusively as general building ventilation need not be included in any required modeling analyses.

4. Modeling requirements for changes at facilities that conducted air dispersion modeling, as required in B.2.:

a. Prior to making a change described under B.4.b., the owner or operator shall demonstrate through an air dispersion modeling analysis that the facility's emissions will not cause or exacerbate a violation of an ambient air quality standard for the following pollutants: particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, and lead.

b. Modeling is required prior to making any of the following changes at the facility:

(1) Adding a new stack or emissions unit that will emit one of the listed pollutants.

(2) Making physical changes to an existing stack that would allow for an increase in the ambient impact of one of the listed pollutants.

(3) Making operational changes that would increase the maximum controlled emission rate of one of the listed pollutants.

Note: Stacks venting emission units listed in Attachment 1 and stacks that serve exclusively as general building ventilation need not be included in any required modeling analyses.

C. PROHIBITIONS

Changes at your facility that result in any of the following will make your facility ineligible to remain covered under this Registration Permit. You will need to apply for and receive a different type of permit *before* doing any of the following activities.

1. The owner or operator may not add or change emission units or operations so that the facility would be considered an affected source under ch. NR 409, Wis. Adm. Code, a municipal solid waste combustion source under s. NR 500.03(86), Wis. Adm. Code or an infectious waste combustion source.[s. NR 407.105(3)(a), Wis. Adm. Code.]

2. The owner or operator may not add or change emission units, operations, or stacks so that they cause or exacerbate a violation of an ambient air quality standard, demonstrated as required in condition B.3 and B.4. [s. NR 407.105(3)(c), Wis. Adm. Code.]

3. Except as allowed in section H. of this permit, the owner or operator may not add or change emission units or operations so that the emission unit or facility would become subject to a standard or regulation under s. 111 of the Act (New Source Performance Standards) or to a MACT standard under s. 112 of the Act.[5] [s. NR 407.105(3)(d), Wis. Adm. Code.]

4. The owner or operator may not add or change emission units or operations so that the emissions of HAPs regulated under ch. NR 445, Wis. Adm. Code, require a case-by-case BACT or LAER determination. [s. NR 407.105(4)(b), Wis. Adm. Code.]

[5]Standards under s. 112 that require control to a level considered Generally Available Control Technology (GACT) are allowed under the permit. See Section H.

D. COMPLIANCE DEMONSTRATION REQUIREMENTS

All facilities need to meet the compliance demonstration requirement in D.1. and D.2.

1. Facility-wide Annual Actual Emission Calculations:

By March 1st of each year, the owner or operator shall calculate the facility-wide annual actual emissions of particulate matter, volatile organic compounds, sulfur dioxide, nitrogen oxides, carbon monoxide, lead, each federally regulated hazardous air pollutant, and all federally regulated hazardous air pollutants combined, emitted by the facility in the previous calendar year. Emissions shall be calculated as follows:

a. All emissions from the facility shall be included in the calculation except emissions from emissions units listed in Attachment 1.

b. If the facility uses a control device to reduce emissions, the control efficiencies listed in Section G of this permit shall be used to calculate annual actual emissions. Only control devices listed in this permit or specifically required in an applicable air pollution requirement may be considered in calculating the facility-wide annual actual emissions. Where the control efficiencies listed in the permit and the specific control efficiencies required in an applicable requirement differ, the higher control efficiency may be used to calculate annual actual emissions.

c. Work practices and pollution prevention techniques that reduce emissions are not considered control devices for the purposes of this permit. These practices and techniques may be considered when calculating the facility-wide annual actual emissions as long as such reductions are quantifiable[6].

d. Facility-wide annual actual emissions shall be calculated using the actual operating schedule, actual amounts of raw materials used or products produced, or actual amounts of fuels burned during the calendar year. [s. NR 407.105(1)(c), Wis. Adm. Code.]

2. Other Applicable Requirements:

The owner or operator shall ensure that appropriate methods for demonstrating compliance are in place and followed for all other requirements applicable to this facility in ch. 285, Wis. Stats., and chs. NR 400 to NR 499, Wis. Adm. Code, and all applicable federal air pollution requirements in the Clean Air Act (42 USC 7401 to 7671q) and 40 CFR parts 50 to 97. [s. NR 407.105(1)(c), Wis. Adm. Code.]

Facilities that need to use a control device to meet any applicable emission limit must meet the following compliance demonstration requirements

3. If the owner or operator must use a control device to meet the facility-wide annual actual emissions limit in A.1., or any other applicable emission limitation in ch. 285, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code, or any other applicable federal air pollution requirement in the Clean Air Act (42 USC 7401 to 7671q and 40 CFR parts 50 to 97), then the following requirements shall be met:

a. The control device shall be listed in Section G of this permit or otherwise specifically required by an applicable air pollution requirement.

b. The control device shall meet, at a minimum, the control efficiency listed in Section G for the device or the specific control efficiency required in the applicable air pollution requirement, whichever is higher.

c. The control device shall be used at all times the emission unit is operating except as allowed by the applicable emission limitation. [s. NR 407.105(1)(c), Wis. Adm. Code.]

[6] Work practices that reduce emissions include techniques such as applying water to dust piles or road ways, the practice of keeping containers of organic compounds or used rags covered and other pollution prevention techniques.

E. RECORDKEEPING AND MONITORING REQUIREMENTS

All facilities must follow the requirements in E.1. through E.3.

1. Records to Calculate Annual Actual Emissions:

The owner or operator shall maintain records sufficient to calculate facility-wide annual actual emissions for the previous calendar year as required in Condition D.1. [ss. NR 407.105(1)(c) and 439.04(1)(d), Wis. Adm. Code.]

2. Recordkeeping and Monitoring Requirements for all Other Applicable Requirements:

The owner or operator shall conduct monitoring and maintain records sufficient to demonstrate compliance with other applicable requirements in ch. 285, Wis. Stats., and chs. NR 400 to NR 499, Wis. Adm. Code, and applicable federal air pollution requirements in the Clean Air Act (42 USC 7401 to 7671q) and 40 CFR parts 50 to 97. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

3. Records of Stack Parameters:

The owner or operator of a facility shall keep and maintain on site technical drawings, blueprints or equivalent records that describe or illustrate the physical stack parameters of each stack. Stacks that only vent emissions from emissions units listed in Attachment 1, and stacks serving exclusively as general building ventilation, do not need to meet this requirement. [s. 285.65(3), Wis. Stats.]

4. Modeling Records:

If the owner or operator demonstrated eligibility for this permit through an air quality modeling analysis or if the owner or operator subsequently performed an air quality modeling analysis as required under B.3 or B.4. of this permit, the owner or operator shall maintain on site records of the following:

a. Modeling input files used in the modeling analyses and the output files sufficient to show the results of all required modeling analyses. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

b. If required to model under Section B.3. or 4. of this permit, the owner or operator shall also maintain records describing the change that was made and the start date of the construction or modification. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

5. Records Retention:

The owner or operator shall keep on site all records required by this permit for at least five years, unless a longer time period is required under any other condition of this permit or by statute or rule. [ss. NR 407.105(1)(c), NR 439.04(1)(d), and NR 439.04(2), Wis. Adm. Code.]

The monitoring and recordkeeping requirements below apply to facilities that must use a control device in order to meet any limit in this permit.

6. Air Pollution Control Device Monitoring:

If a source at the facility is equipped with an air pollution control device, the owner or operator shall monitor the operation of the control device to ensure that it is operating properly. The parameters to be monitored are contained in E.8. of this permit. If a control device is not listed in E.8. of this permit, the owner or operator shall monitor the device as recommended by the control device manufacturer or based on good engineering practice. [ss. 285.65(3), Wis. Stats and NR 406.17(1)(c) and NR 439.055, Wis. Adm. Code]

E. RECORDKEEPING AND MONITORING REQUIREMENTS

7. Air Pollution Control Device Operational Parameter Ranges:

The owner or operator shall maintain a list of the proper control device parameter ranges for each control device at the facility. These ranges shall be based on the control device manufacturer's recommendations or good engineering practice as established by operational history. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

8. Air Pollution Control Device Monitoring Records:

For each control device used to meet any applicable emission limit, the owner or operator shall monitor and record the appropriate control device parameters at the frequency specified in s. NR 439.055(2), Wis. Adm. Code. If the facility operates a type of control device that is not listed below, then the owner or operator shall keep records of control device parameters which demonstrate the proper operation of the device per the manufacturer's specifications. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

Table 2. Control Device Parameters

If you operate this control device:	You must monitor this parameter:
Centrifugal Collector (cyclone)	Pressure drop
Multiple cyclone w/out flyash reinjection	Pressure drop
Multiple cyclone with flyash reinjection	Pressure drop
Wet cyclone separator	Pressure drop and water flow rate
Wall filters (including paint overspray filters and rotary drum filters)	Pressure drop **OR** Condition of filter including alignment, saturation and tears/holes
Fabric filters and HEPA filters (e.g., baghouse, cartridge collectors)	Pressure drop
Spray towers	Pressure drop and water flow rate
Venturi scrubber	Pressure drop and scrubber liquor flow rate
Condensation scrubber (packed bed)	Pressure drop and scrubber liquor flow rate
Impingement plate scrubber	Pressure drop and scrubber liquor flow rate
Electrostatic precipitators	Primary and secondary voltage, in volts; primary and secondary current, in amps; and sparking rate, in sparks per minute
Thermal oxidizers	Temperature in the combustion chamber
Catalytic oxidizers	Temperature in the inlet to the catalytic bed; and Catalyst bed reactivity
Condenser	Condenser outlet gas temperature
Flaring or direct combustor	Temperature indicating presence of flame
Biofilter	Bed temperature, moisture content
Carbon Adsorption	Pressure drop, VOC concentration at outlet

F. REPORTING AND NOTIFICATION REQUIREMENTS

All facilities covered by this permit must meet the reporting and notification requirements in F.1 and F.2.

1. Annual Summary of Monitoring, and Certification of Compliance

By **March 1** of each year after the first full year of coverage, the owner or operator shall submit an annual summary of monitoring, and a compliance certification to the Wisconsin Department of Natural Resources, Bureau of Air Management, Compliance and Enforcement Section, 101 S. Webster St, PO Box 7921, Madison, WI 53707.

a. The report submission under this condition shall meet the requirements of s. NR 439.03(1)(b) and (c), Wis. Adm. Code.:

b. The report shall be certified by a responsible official as to the truth, accuracy and completeness of the report.

c. The time period to be addressed by the report is the January 1 to December 31 period that precedes the report. [ss. NR 407.105(1)(c), and NR 439.03(1)(b) and (c), Wis. Adm. Code.]

2. Air Emission Inventory Report:

By March 1 of each year, the owner or operator shall submit an air emission inventory report of annual, actual emissions or throughput information in accordance with ch. NR 438, Wis. Adm. Code. If facility emissions are below the reporting thresholds in ch. NR 438, Wis. Adm. Code, the facility may submit, in lieu of a full inventory report, notification and documentation that its emissions are below reporting thresholds. [ss. NR 407.105(1)(c) and NR 438.03(1)(c), Wis. Adm. Code.]

Additional reporting for facilities that changed ownership or did air quality modeling prior to making changes during the past year.

3. Change of Ownership or Control:

The Bureau of Air Management shall be notified of a change of ownership or control of a facility covered by this permit within 30 calendar days after the change. The notification shall specify a date for the transfer of permit responsibility, coverage and liability. [s. NR 407.105(1)(c), Wis. Adm. Code]

4. Reporting requirement for facilities required to model under B.3. or 4. of this permit:

If required to model prior to making changes under B.3 or B.4. of this permit, the owner or operator shall submit with the annual certification required in F.1. the following information associated with operational changes at the facility:

a. A brief description of the change which caused the need to perform modeling under B.3. or B.4.[7]

b. The results of air quality modeling required under B.3. or B.4. including the modeled concentrations, the background concentration, and the total concentrations. [ss. NR 407.105(1)(c) and NR 439.04(1)(d), Wis. Adm. Code.]

Note:

- This requirement does not apply to changes at emission units that emit exclusively volatile organic compounds, to emissions units listed in Attachment 1 or to stacks serving exclusively as general building ventilation.

[7] Examples include, but are not limited to, addition or modifications of processes, adding or changing a raw material, or changes to pollution control devices, stack heights diameters, and other stack parameters, stack locations, and building heights.

F. REPORTING AND NOTIFICATION REQUIREMENTS

Facilities that want to change operations in such a way that they'll no longer be eligible for this permit must notify the Department as follows *before* making these changes:

5. Changes Rendering Your Facility Ineligible for This Permit:

If the owner or operator plans to make a change at the facility that will result in the facility no longer being eligible for this permit:

a. Before making the change, the owner or operator shall submit to the Department an application for a construction permit, unless the change is exempt under ch. NR 405, 406 and 408.

b. Before making the change, the owner or operator shall request in writing that coverage under this registration permit be revoked upon issuance of any required air permit, and submit to the Department an application for a different type of permit if required.

c. The owner or operator may not make the change until any required air pollution control construction and/or operation permit(s) are obtained.

[s. NR 407.105(6)(a) and (e), Wis. Adm. Code.]

Additional reporting requirements for Portable Sources

6. Relocation Requirements:

a. The owner or operator of a portable source covered by this registration permit shall provide written notice to the department at least 20 days prior to relocation. Relocation may occur if the Department does not object to the relocation.

b. If a portable source relocates to a location with a different emission threshold in condition A.1. for any pollutant during any calendar year, the owner or operator shall calculate the amount of emissions that occurred at the previous location and the amount of emissions that occurred at the new location. The owner or operator shall compare those emission rates to the appropriate thresholds in condition A.1. of this permit. If the emission rate of any pollutant at the new location is greater than its emission limit, the owner or operation shall apply for a different type of operation permit within 30 days of identifying the exceedance.

c. The portable source in its new location shall meet all applicable emission limitations and visibility requirements in the Department's rules and may not violate an air quality standard.

[s. 285.60(5), Wis. Stats.]

G. AIR POLLUTION CONTROL DEVICE REQUIREMENTS

Table 3. Air Pollution Control Device Efficiencies

Control Device	Control Efficiency (Total Enclosure)[8]			Control Efficiency (Hood)		
	PM	PM_{10} and PHAP	VOC and VHAP	PM	PM_{10} and PHAP	VOC and VHAP
Low efficiency cyclone[9]	40%	20%	-	32%	16%	-
Medium efficiency cyclone[9]	60%	40%	-	48%	32%	-
High efficiency cyclone[9]	80%	60%	-	64%	48%	-
Multiple cyclone w/out flyash reinjection	80%	60%	-	64%	48%	-
Multiple cyclone with fly ash reinjection	50%	38%	-	40%	30%	-
Wet cyclone separator	50%	38%	-	40%	30%	-
Wall filters (including paint overspray filters and rotary drum filters)	95%	95%	-	76%	76%	-
Fabric filters and HEPA (e.g., baghouse, cartridge collectors)	98%	92%	-	78%	73%	-
Spray towers	80%	80%	70%	64%	64%	56%
Venturi scrubber	90%	85%	-	72%	68%	-
Condensation scrubber (packed bed)	90%	90%	-	72%	72%	-
Impingement plate scrubber	75%	75%	-	60%	60%	-
Electrostatic precipitators	95%	95%	-	76%	76%	-
Thermal oxidizers	-	-	95%	-	-	76%
Catalytic oxidizers	-	-	95%	-	-	76%
Condenser	-	-	70%	-	-	56%
Flaring or direct combustor	-	-	98%	-	-	78%
Biofilter	-	-	80%	-	-	64%
Adsorber (activated carbon systems, carbon adsorption, solvent recovery)			85%			68%

Table 4. Cyclone Efficiency Table

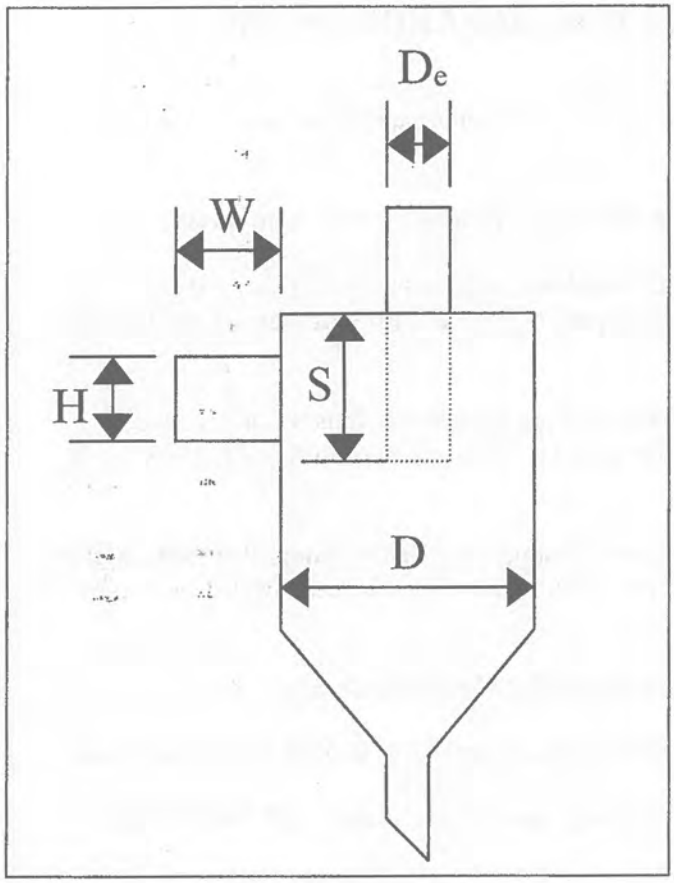
(see Diagram 1. on next page for cyclone dimension nomenclature)

Ratio Dimensions	High Efficiency	Medium Efficiency	Low Efficiency
Height of inlet, H/D	≤0.44	>0.44 and <0.8	≥0.8
Width of inlet, W/D	≤0.2	>0.2 and <0.375	≥0.375
Diameter of gas exit, D_e/D	≤0.4	>0.4 and <0.75	≥0.75
Length of vortex finder, S/D	≤0.5	>0.5 and <0.875	≥0.875

If one or more of the "ratio dimensions," as listed in Table 4, are in a different efficiency category (high, medium, low), then the lowest efficiency category shall be applied.

[8] VHAP = Volatile hazardous air pollutant, PHAP = Particulate hazardous air pollutant.
[9] See Table 4, below, to identify level of efficiency for cyclones.

Diagram 1. Cyclone Dimension Nomenclature



H. ALLOWABLE NEW SOURCE PERFORMANCE STANDARDS and NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

1. Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (s. NR 440.207, Wis. Adm. Code).

2. Standards of Performance for Hot Mix Asphalt Facilities (s. NR 440.25, Wis. Adm. Code).

3. Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After June 11, 1973 and Prior to May 19, 1978 (s. NR 440.27, Wis. Adm. Code).

4. Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978 and Prior to July 23, 1984 (s. NR 440.28, Wis. Adm. Code).

5. Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984 (s. NR 440.285, Wis. Adm. Code).

6. Standards of Performance for Grain Elevators (s. NR 440.47, Wis. Adm. Code).

7. Standards of Performance for Surface Coating of Metal Furniture (s. NR 440.48, Wis. Adm. Code).

8. Standards of Performance for Industrial Surface Coating: Large Appliances (s. NR 440.57, Wis. Adm. Code).

9. Standards of Performance for Petroleum Dry Cleaners (s. NR 440.68, Wis. Adm. Code).

10. Standards of Performance for Nonmetallic Mineral Processors (s. NR 440.688, Wis. Adm. Code).

11. Standards of Performance for Industrial Surface Coating of Plastic Parts for Business Machines (s. NR 440.72, Wis. Adm. Code).

12. Any New Source Performance Standard or National Emission Standards for Hazardous Air Pollutants (also known as Maximum Achievable Control Technology (MACT) Standard), where the facility or process is only subject to recordkeeping or notification requirements of that standard. [s. 285.65(3), Stats.]

13. National Emission Standards for Hazardous Air Pollutants for Area Sources controlled to a level considered to be Generally Available Control Technology Standards or GACT in 40 CFR Part 63. The following list is updated as EPA finalizes the standards:

    - Oil and Natural Gas Production - Subpart HH - National Emission Standards for Oil & Natural Gas Production

    - Stationary Internal Combustion Engines - Subpart ZZZZ - National Emission Standards for Reciprocating Internal Combustion Engines

H. ALLOWABLE NEW SOURCE PERFORMANCE STANDARDS and NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

- Hospital Sterilizers - Subpart WWWWW—National Emission Standards for Hospital Ethylene Oxide Sterilization
- Gasoline Distribution Stage I - Subpart BBBBBB—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, Pipeline Facilities, and Gasoline Dispensing Facilities
- Primary Nonferrous Metal Production – Zinc, Cadmium, and Beryllium - Subpart GGGGGG - National Emission Standards for Hazardous Air Pollutants for Area Sources: Primary Nonferrous Metals: Zinc, Cadmium, and Beryllium
- Primary Copper Smelting - Subpart EEEEEE - National Emission Standards for Hazardous Air Pollutants for Area Sources: Primary Copper Smelting,
- Polyvinyl Chloride and Copolymers Production - Subpart DDDDDD - National Emission Standards for Hazardous Air Pollutants for Area Sources: Polyvinyl Chloride and Copolymers Production,
- Secondary Copper Smelting Subpart FFFFFF - National Emission Standards for Hazardous Air Pollutants for Area Sources: Secondary Copper Smelting
- Carbon Black Production - Subpart MMMMMM—National Emission Standards for Hazardous Air Pollutants for Carbon Black Production Area Sources
- Acrylic Fibers/Modacrylic Fibers Production - Subpart LLLLLL—National Emission Standards for Hazardous Air Pollutants for Acrylic and Modacrylic Fibers Production Area Sources
- Flexible Polyurethane Foam Production - Subpart OOOOOO—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources
- Lead Acid Battery Manufacturing - Subpart PPPPPP—National Emission Standards for Hazardous Air Pollutants for Lead Acid Battery Manufacturing Area Sources
- Wood Preserving - Subpart QQQQQQ—National Emission Standards for Hazardous Air Pollutants for Wood Preserving Area Sources
- Chemical Manufacturing: Chromium Compounds - Subpart NNNNNN—National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds
- Flexible Polyurethane Foam Fabrication Operations - Subpart OOOOOO—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources

H. ALLOWABLE NEW SOURCE PERFORMANCE STANDARDS and NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

- Paint Stripping Operations and Miscellaneous Surface Coating Operations - Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

- Auto Body Refinishing - Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

- Clay Ceramics Manufacturing - Subpart RRRRRR—National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing Area Sources

- Iron Foundries - Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

- Plastic Parts and Products (Surface Coating) - Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

- Pressed and Blown Glass Manufacturing - Subpart SSSSSS—National Emission Standards for Hazardous Air Pollutants for Glass Manufacturing Area Sources

- Secondary Nonferrous Metals - Subpart TTTTTT—National Emission Standards for Hazardous Air Pollutants for Secondary Nonferrous Metals Processing Area Sources

- Steel Foundries - Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources

- Plating and Polishing Operations – Subpart WWWWWW - National Emission Standards for Hazardous Air Pollutants Area Source Standards for Plating and Polishing Operations

- Nine Metal Fabrication and Finishing Source Categories – Subpart XXXXXX - National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories including
    - Electrical and Electronic Equipment Finishing Operations
    - Fabricated Metal Products
    - Fabricated Plate Work (Boiler Shops)
    - Fabricated Structural Metal Manufacturing
    - Heating Equipment, except Electric
    - Industrial Machinery and Equipment Finishing Operations
    - Iron and Steel Forging
    - Primary Metal Products Manufacturing; and
    - Valves and Pipe Fittings.

H. ALLOWABLE NEW SOURCE PERFORMANCE STANDARDS and NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

14. National Emission Standards for chromium emissions from hard and decorative chromium electroplating and chromium anodizing tanks (40 CFR Part 63 subpart N) – allowed only for units that are area source or located at area sources and which are any of the following:

- Any decorative chromium electroplating operation or chromium anodizing operation that uses fume suppressants as an emission reduction technology
- Any decorative chromium electroplating operation that uses a trivalent chromium bath that incorporates a wetting agent as a bath ingredient

15. Standards of Performance for spark ignition internal combustion engines (40 CFR part 60 subpart JJJJ) – allowed only for the owner/operator of manufacturer-certified affected engines.

16. Standards of Performance for compression ignition internal combustion engines (40 CFR part 60 subpart IIII) – allowed only for the owner/ operator of manufacturer certified affected engines that are 2007 model year or later with displacements less than 30 liters per cylinder.

ATTACHMENT 1
EMISSION UNITS NOT SUBJECT TO CERTAIN REGISTRATION PERMIT REQUIREMENTS

1. Convenience space heating units with heat input capacity of less than 5 million Btu per hour that burn gaseous fuels, liquid fuels or wood

2. Convenience water heating

3. Maintenance of grounds, equipment and buildings, including lawn care, pest control, grinding, cutting, welding, painting, woodworking, general repairs and cleaning, but not including use of organic compounds as clean–up solvents

4. Boiler, turbine, generator, heating and air conditioning maintenance

5. Pollution control equipment maintenance

6. Internal combustion engines used for warehousing and material transport, forklifts and courier vehicles, front end loaders, graders and trucks, carts and maintenance trucks

7. Fire control equipment

8. Janitorial activities

9. Office activities

10. Fuel oil storage tanks with a capacity of 10,000 gallons or less

11. Stockpiled contaminated soils

12. Demineralization and oxygen scavenging of water for boilers.

13. Purging of natural gas lines.

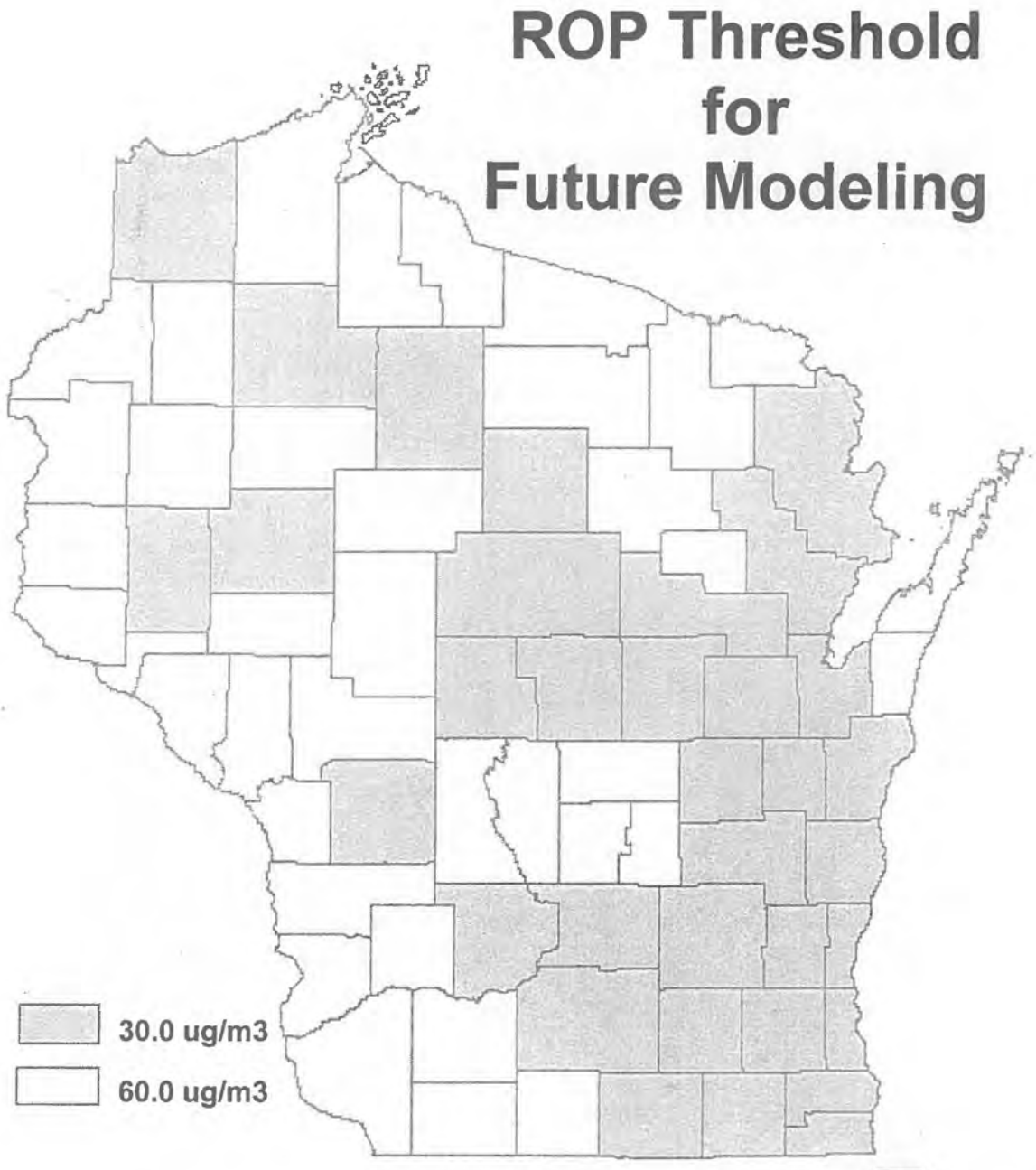
14. Any emission unit, operation, or activity that has, for each air contaminant, maximum controlled emissions that are less than the level specified in Table 3 of ch. NR 407, Wis. Adm. Code. Multiple emissions units, operations, or activities that perform identical or similar functions shall be combined for the purposes of this determination.

15. If the maximum controlled emissions of any air contaminants listed in Table 3 of ch. NR 407, Wis. Adm. Code, from all emission units, operations or activities at a facility are less than 5 times the level specified in Table 3, for those air contaminants, any emission unit operation or activity that emits only those air contaminants.

ATTACHMENT 2

Particulate Matter Modeling Threshold Concentrations by County

This map is current up to the date specified below and may be updated periodically. Updates will be posted at http://dnr.wi.gov/air/permits/streamlining/regpermits.html



Updated 08/15/2006

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711

November 15, 2011

FILE CODE: 4530
FID # : 268430470
PERMIT COVERAGE#: 268430470-ROPA

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Paul McShane
Branch General Manager
Veolia ES Technical Solutions, LLC
W124 N9451 Boundary Road
Menomonee Falls WI 53051

Subject: Approval of Coverage under Type A Registration Operation Permit and Type A Registration Construction Permit

Dear Mr. McShane:

The Air Management Program of the Department of Natural Resources (DNR) has performed a review of the request received on November 11, 2011, for coverage under the Type A Registration Operation Permit (ROP) and Type A Registration Construction Permit (RCP). Enclosed is DNR's decision to approve your application for coverage under these permits.

Type A Registration Permit Coverage Number: 268430470-ROPA

Facility: Veolia ES Technical Solutions, LLC
W124 N9451 Boundary Road
Menomonee Falls, Waukesha County, Wisconsin

Responsible Official: Mr. Paul McShane, Branch General Manager

The enclosed Registration Permits are issued to provide authorization for your facility to operate in accordance with the requirements and conditions set forth in the Permits. These permits are also available on line at http://dnr.wi.gov/air/permits/streamlining/regpermits.html. Please read them carefully. Compliance assistance materials are also available at this website, and a compliance checklist has been sent the facility's permit contact. If, in the future, you anticipate that your facility will not be able to continue to comply with the conditions of the Registration Permits, you should apply for and obtain a different type of air permit prior to exceeding any of the limits in the Registration Permits.

A copy of the Registration Permits should be available at the source for inspection by any authorized representative of the Department. Questions about demonstrating compliance with this permit, and annual compliance certifications and monitoring reports, and any other reports or notifications should be directed to George Volpentesta at the Southeast Region Air Program, Wis. Dept. of Natural Resources, 141 NW Barstow St, Room 180, Waukesha, WI 53188, phone: 262-574-2150, email: George.Volpentesta@Wisconsin.gov.

If you have any questions regarding this permit, please feel free to contact me, by telephone at 608-273-5605 or by e-mail at Kristin.Hart@wisconsin.gov.

BEFORE THE DEPARTMENT OF NATURAL RESOURCES
AIR MANAGEMENT PROGRAM
FINDINGS OF FACT
CONCLUSIONS OF LAW
AND DECISION

Findings of Fact

The Department of Natural Resources (DNR) finds that:

1) Veolia ES Technical Solutions, LLC, W124 N9451 Boundary Road, Menomonee Falls, Waukesha County, Wisconsin, has applied for coverage under a Type A Registration Construction Permit (RCP) and Registration Operation Permit (ROP).

2) Veolia ES Technical Solutions, LLC submitted a request for coverage under the ROP and RCP and plans and specifications and additional information describing the air pollution sources on November 11 and 15, 2011.

3) DNR has reviewed Veolia ES Technical Solutions, LLC's ROP and RCP coverage request, plans, specifications and other information available to DNR.

4) DNR has prepared an analysis on the approvability of applications for the RCP and ROP.

5) Veolia ES Technical Solutions, LLC, is a Synthetic Minor Non-Part 70 source.

6) DNR has complied with the procedures set forth in s. 285.62, Wis. Stats.

7) DNR has determined that Veolia ES Technical Solutions, LLC meets the criteria for permit approval contained in s. 285.63, Wis. Stats.

8) DNR has complied with the requirements of s. 1.11, Stats., and ch. NR 150, Wis. Adm. Code.

Conclusions of Law

DNR concludes that:

1) DNR has authority under sec. 285.11(1), Wis. Stats., to promulgate rules contained in chs. NR 400-499, Wis. Adm. Code, including but not limited to rules containing emission limits, compliance schedules and compliance determination methods.

2) DNR has the authority under ss. 285.11(1), (5) and (6), 285.27(1) and (2) and 285.65, Wis. Stats., and chs. NR 400-499, Wis. Adm. Code, to establish emission limits for sources of air pollution.

3) DNR has the authority to issue air pollution control registration permits and to include conditions in such permits under ss. 285.60, 285.62, 285.63, 285.64, and 285.65, Wis. Stats.

4) The emission limits included in the ROP and RCP are authorized by ss. 285.65, Wis. Stats., and NR 400-499, Wis. Adm. Code.

5) DNR is required to comply with sec. 1.11, Stats., and ch. NR 150, Wis. Adm. Code, in conjunction with approving coverage under a ROP and RCP.

Decision

Veolia ES Technical Solutions, LLC is authorized to operate a facility with low actual air pollution emissions in conformity with the emission limits, monitoring, record keeping and reporting requirements set forth in the attached Type A Registration Permits.

A p p e n d i x C

Tank Integrity Assessment and Certification

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

VEOLIA
ENVIRONMENTAL SERVICES
TECHNICAL SOLUTIONS
NORTH AMERICA

GREEN TIER

July 26, 2012

Ms. Sandy Miller
Waste Management Specialist
Licensing and Policy Review Coordinator
Wisconsin Department of Natural Resources
110 S. Neenah Avenue
Sturgeon Bay, WI 54235

Re: File No. FID268224880
EPA ID No. WID003967148

Dear Ms. Miller:

Pursuant to Condition No. 43, of the Final Determination, attached are two copies of the annual Tank Integrity Assessment Report for the hazardous waste tanks located within the stabilization process.

Please contact me, at (262) 255-6655 if you have any questions or concerns regarding this submittal.

I certify under penalty of law that this document and all attachments were prepare under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Tom Daly

Tom Daly
Branch EHS Manager

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road, Menomonee Falls, WI 53051
tel: 262-255-6655 - fax: 262-255-6655
www.VeoliaES.com

One Honey Creek Corporate Center
125 South 84th Street, Suite 401
Milwaukee, WI 53214-1470
414 / 259 1500
414 / 259 0037 fax
www.graef-usa.com

GRAEF

collaborate / formulate / innovate

July 26, 2012

Mr. Bob Pietsch
Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

SUBJECT: Veolia Tank Integrity Assessments

Dear Mr. Pietsch:

We have completed the report for the tank integrity assessments (See attached documents). If you have any questions, please call (414)-266-9040.

Sincerely,

John Kannall

John H. Kannall, P.E.
Project Manager

JHK:jhk
F:Drive - Veolia - Tank Evaluations - 2012 – Preliminary Cover Letter

Attachments: Tank Integrity Assessments Report

2012-0302.00

Waste Receiving Tank, Baghouse Tank, and Waste Silo Certification
Waste Stabilization Facility

For

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

July 26, 2012

Prepared By:

GRAEF
One Honey Creek Corporate Center
125 South 84th Street, Suite 401
Milwaukee, Wisconsin 53214-1470
(414) 259-1500

Project Manager: JOHN H. KANNALL, P.E.

GRAEF Project No. 2012-0302.00

Scope of Work

The scope of this certification is to visually inspect the waste receiving tank, baghouse tank, and waste silo and note any indications of deterioration that might structurally compromise the ability to perform intended functions.

On Wednesday, April 4, 2012 Mr. John Kannall of Graef visually inspected the waste receiving tank, baghouse tank, and waste silo. Field observations were made based on the following criteria:

1. Plate integrity of the waste receiving tank under backhoe impact.
2. Plate seam integrity on walls and connections.
3. Integrity of welds of tank plates.
4. Possible expansion and contraction of tank plates.
5. Signs of leakage or seepage into containment area under tank.
6. Connection bolts and sheet metal screws.

Waste Receiving Tank

The plates at the base of the tank were completely replaced in 2010. These plates were in good condition. Routine maintenance of the tank has required the installation of welds at a few locations (See Appendix A, Photographs 1, 2 and 3). These welds were checked and approved. It has been noted at previous inspections that deformations caused by backhoe operations existed in the west wall and floor. These appeared to be in good condition at this inspection. Also during this inspection the secondary containment pit below the tank was inspected. The pit is relatively clean and dry. A shim plate located underneath the center of the tank below one of the main support beams was noted to deteriorated and missing grout under the northern end of the plate (See Appendix A, Photograph 4). This condition was noticed during the previous inspection. The grout was repaired and approved during a follow up site visit on July 26, 2012.

Baghouse Tank

The external surfaces of the baghouse bottom tank, its supporting beams, columns and x-bracing were visually inspected. Previous reports have indicated very minor x-bracing damage in all three of the east x-braces. Photographs of the braces were taken and compared with previous reports. No signs of additional damage were noted. All of the components are performing their intended function. Stiffener plate repairs noted in previous inspections were checked and approved. A concrete pier that supports one of main columns located on east side of the tank has been damaged at its northeast corner (See Appendix A, Photograph 5). The damage does not extend under the base plate, so the pier is still performing its intended function. If this condition should deteriorate or additional damage should occur in the future that extends under the column base plate, the pier should be repaired.

Waste Silo

The above ground support structure for the waste silo consists of concrete foundations, anchor bolts, columns, beam plates, stiffeners, and cross bracing. The visual inspection of the waste silo included the structural framework below the silo sidewalls and cone section. The visual inspection did not detect any cracks or deterioration of the structural components.

Sealant at a plate at the top of the structure is deteriorated and is probably leaking debris (See Appendix A, Photograph 6). The sealant was repaired and approved during a follow up site visit on July 26, 2012.

Certification

No further conditions required repair after this inspection. Based on Graef's visual field inspection, the areas observed and discussion with Veolia ES Technical Solutions, L.L.C. personnel, it is Graef's opinion that the waste receiving tank, baghouse tank and waste silo do not show deterioration that will compromise the ability to perform their intended functions.

I certify that this document and all attachments were prepared by me in accordance with generally accepted engineering practice. The information submitted is to the best of my knowledge and belief, true, accurate and complete.

I, John Kannall, hereby certify that I am a registered Professional Engineer in the State of Wisconsin in accordance with Chapter A-E4, Wisconsin Administrative Code and that this report has been prepared in accordance with the Rules of Professional Conduct in Chapter A-E8, Wisconsin Administrative Code.

John H Kannall 7/26/2012 Number E - 28466

John H. Kannall Date

Inspection and Supervising Registered Professional Engineer

Appendix A

Photographs of Observations

Photograph 1

(New weld at the top of the wall of the waste receiving tank)

Photograph 2

(New weld at the corner of the waste receiving tank)

Photograph 3

(New weld at the top of the of the wall of the waste receiving tank)

Photograph 4

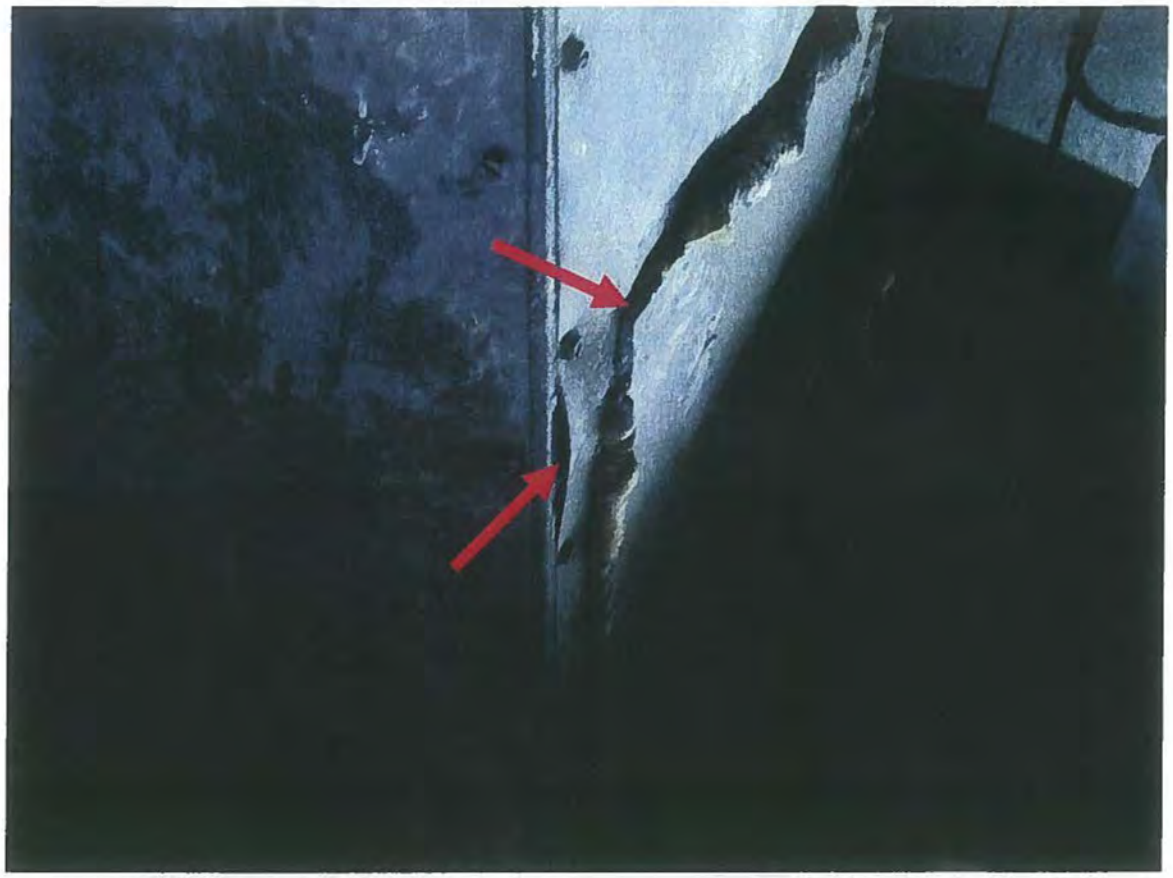
(Deteriorated grout under the base plate at the pit floor below the tank)

Photograph 5

(Damaged column pier at east side of baghouse tank)

Photograph 6

(Deteriorated sealant at sheet metal and plate at top level of waste silo)



A p p e n d i x D

Chemical Sealant

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

MATERIAL SAFETY DATA SHEET

SECTION I

DATEOF PREPARATION
June 2011

PRODUCT NAME:	**ICO Super Guard**
PRODUCT CLASS:	Epoxy Resin, Part A
PRODUCT TYPE:	Polymers of Epichlorohydrin Phenol-formaldehyde Novolac
D.O.T. CATEGORY:	Environmentally Hazardous Substances, Liquid NOS (Epoxy phenol novolac resin) 9 UN 3082 PG III
ADDRESS:	**International Coatings** 2925 Lucy Lane Franklin Park, IL 60131
TELEPHONE:	847-451-0279
EMERGENCY:	800-535-5053

SECTION II - HAZARDOUS INGREDIENTS

NFPA Hazard Rating - Health 3, Flammability 1, Reactivity 0
Listed below are the hazardous component(s) as defined in 49 CFR 172 and 29 CFR 1910 which are present in this product and all components which appear on the hazardous substance list of any state.

Resorcinol diglycidyl ether CAS# 0000101-90-6

SECTION III - PHYSICAL DATA

PHYSICAL STATE:	Moderate viscosity, amber liquid
SPECIFIC GRAVITY:	1.2 at 77°F
DENSITY:	9.7 lbs/gal
PERCENT VOLATILES:	0 at 70°F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	>200°F (Pensky Martens Closed Cup)
EXTINGUISHING DATA:	Foam. Dry chemical, Carbon Dioxide (CO_2)
FLAMMABLE LIMITS	LFL: Not Applicable UFL: Not Applicable
FIRE EXPLOSION HAZARDS:	High Temperature will cause combustion.
FIRE FIGHTING EQUIPMENT:	Wear positive pressure, self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

EYE:	This material will cause eye irritation.
SKIN CONTACT:	This material is a skin irritant and can be an allergic sensitizer. **CAUTION: DO NOT ALLOW SKIN CONTACT**. This material can cause severe skin irritation.
SKIN ABSORPTION:	Can be absorbed through skin. The LD50 for rats is between 300-400 mg/kg.
INGESTION:	Swallowing will be a health hazard.
INHALATION:	Inhalation may cause a severe allergic reaction. Mice and rats in a 2 year study when administered by gavage resulted in an increase in forestomach carcinoma.

EMERGENCY AND FIRST AID PROCEDURES:

EYES:	Flush with water immediately. Continue to flush for 30 minutes and obtain emergency medical attention.
SKIN:	Remove and do not reuse contaminated clothing. Immediately wash exposed areas very thoroughly with soap and water and flush for 15 minutes. It is not recommended to remove resin from skin with solvents.
INGESTION:	**Do not** induce vomiting. Get medical attention immediately.
INHALATION:	Remove to fresh air. If breathing is labored administer oxygen. Call a physician.

SECTION VI - REACTIVITY DATA

STABILITY: (conditions to avoid) Excessive heating over long periods of time degrades the resin, increases viscosity, and epoxide equivalent weight.
INCOMPATIBILITY: (specific materials to avoid) Acids, bases, and amines.
HAZARDOUS DECOMPOSITION PRODUCTS: The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins, therefore, should be treated as potentially hazardous substances, and appropriate precautions should be taken.
HAZARDOUS POLYMERIZATION: Will not occur by itself, but masses of more than one pound of product plus an aliphatic amine may cause irreversible polymerization with considerable heat build-up.

SECTION VII - SPILL OR LEAK PROCEDURE

ACTION TO TAKE FOR SPILLS/LEAKS: Soak up with absorbent material such as sand and collect in suitable containers. Residual resin can be removed with hot, soapy water. Solvents are not recommended for cleanup unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed. Consult appropriate solvent MSDS for handling information and exposure guidelines.
DISPOSAL METHOD: Burn in adequate incinerator or bury in an approved landfill in accordance with applicable federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

EXPOSURE GUIDELINES:	None established.
VENTILATION:	Good general ventilation should be sufficient for most operations.
RESPIRATORY PROTECTION:	For most conditions, no respiratory protection should be needed; however, in dusty atmospheres, use an approved dust respirator.
SKIN PROTECTION:	Impervious protection clothing should be worn. Neoprene coated fabric is recommended.
EYE PROTECTION:	Splash goggles or full face shield should be worn.

SECTION IX - SPECIAL PRECAUTIONS

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Practice caution and personal cleanliness to avoid skin and eye contact. Avoid breathing vapors of heated material.

SECTION X - TRANSPORTATION

DOT PROPER SHIPPING NAME:	Environmentally Hazardous Substances, Liquid NOS (Epoxy phenol novolac resin)
DOT HAZARD CLASSIFICATION OR DIVISION:	9
IDENTIFICATION NUMBER:	UN 3082
PACKAGING GROUP:	III
LABELS REQUIRED:	None

THE INFORMATION HEREIN RELATES TO THE PRODUCT NAMED AND IS BASED UPON INFORMATION INTERNATIONAL COATINGS CONSIDERS TO BE ACCURATE. NO WARRANTY EXPRESSED OR IMPLIED IS INTENDED

MATERIAL SAFETY DATA SHEET

SECTION I

DATE OF PREPARATION
June 2011

PRODUCT NAME: **ICO Super Guard**
PRODUCT CLASS: Epoxy Resin Hardener, Part B
PRODUCT TYPE: Amine Curing Agent
D.O.T. CATEGORY: UN 2735 Amines, Liquids, Corrosive N.O.S, (Aliphatic Amine) 8 PG III
ADDRESS: **International Coatings**
2925 Lucy Lane
Franklin Park, IL 60131
TELEPHONE: 847-451-0279
EMERGENCY: 800-535-5053

SECTION II - HAZARDOUS INGREDIENTS

NFPA Hazard Ratings - Health 3, Flammability 1, Reactivity 0
Listed below are the hazardous component(s) as defined in 49 CFR 172 and 29 CFR 1910 which are present in this product and all components which appear on the hazardous substance list of any state:

			Exposure Limits		
Ingredient	**CAS #**	**Max Content**	**TWA**	**STEL**	**ceiling**
Benzene- 1,3 Dimethaneamine MXDA)	1477-550	50%	N.E.	N.E.	.100mg/m³(skin)

SECTION III - PHYSICAL DATA

PHYSICAL STATE: Low Viscosity, light straw color
SPECIFIC GRAVITY: 1.12 at 77°F
DENSITY: 9.33 lbs/gal at 77° F
ODOR: Ammoniacal
VAPOR PRESSURE: 5.50 mm Hg @ 70°F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >212°F (Pensky Martens Closed Cup)
LFL: No data
UFL: No data
Extinguishing Media: Water
SPECIAL FIRE FIGHTING PROCEDURES: Use a positive pressure, self-contained breathing apparatus. Wear full protection coating.
Note: Will burn under right conditions of heat and oxygen supply.

SECTION V - HEALTH HAZARD DATA

EYES: Severe eye irritant. Undiluted product can cause burns to eye. Burns may cause blindness.
SKIN CONTACT: Severe skin irritant. May cause skin sensitization.
SKIN ABSORPTION: A single prolonged exposure may result in the material being absorbed in harmful amounts. The LD50 for skin absorption in rabbits is 2000 mg/kg.
INGESTION: Single dose oral toxicity is low. The oral LD50 for rats is between 300-400 mg/kg. Ingestion may cause gastrointestinal irritation or ulceration. Ingestion may cause burns of mouth and throat.
INHALATION: May cause respiratory sensitization in susceptible individuals. Excessive exposure may cause irritation to upper respiratory tract.
SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Did not cause cancer in long-term animal studies. Results of in vitro (test tube) mutagenicity tests have been negative.
FIRST AID:
EYES: Immediate and continuous irrigation with flowing water for at least 15 minutes is imperative. Prompt medical consultation is essential
SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Destroy contaminated shoes and other leather items or articles which cannot be decontaminated.

INGESTION: If swallowed, call a physician immediately. Remove stomach contents by gastric suction or induce vomiting only as directed by medical personnel. Never give anything by mouth to an unconscious person.
INHALATION: Remove to fresh air if effects occur. Consult a physician.
NOTE TO PHYSICIAN: May cause tissue destruction leading to stricture. If lavage is performed, suggest endotracheal and/or esophagoscopic control. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportivecare. Treatment based on judgment of the physician in response to reactions of the patient. Excessive exposure may aggravate pre-existing asthma.

SECTION VI - REACTIVITY DATA

STABILITY: Can auto-ignite at elevated temperatures. No data available.
CONDITIONS TO AVOID (if unstable): Not applicable.
INCOMPATIBILITY (Materials to Avoid): Oxidizing agents (i.e. perchlorates, nitrates etc.).
Cleaning solutions, such as chromerage (sulfuric acid/dichromate) and aqua regia.
A reaction accompanied by large heat release occurs when the product is mixed with acids.
Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.
HAZARDOUS DECOMPOSITION PRODUCTS (from burning, heating, or reaction with other materials)
Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm).
Combustion of product under oxygen-starved conditions can be expected to product numerous toxic products including: nitriles, cyanic acid, isocyanides, cyanogens, nitrosamines, amides and carbamates.
HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURE

ACTION TO TAKE FOR SPILLS/LEAKS: Large spill-dike up and pump into appropriate containers. Small spill - dilute with water and recover or use noncombustible absorbent material/sand and shovel into suitable containers.
WASTE DISPOSAL: Product is classified as “corrosive” and as such must be disposed of as hazardous waste according to Federal, State and local regulations.

SECTION VIII - SPECIAL PRECAUTION INFORMATION

HAND PROTECTION: Wear suitable gloves: nitrile rubber gloves.
RESPIRATORY PROTECTION: In poorly ventilated areas, a cartridge mask National Institute for Occupational Safety and Health (NIOSH) approved for organic vapors is recommended under the following conditions: emergency situations; when product vapor concentration is greater than 20 ppm for a period longer than 15 minutes; during repair and cleaning of equipment; during transfer or discharge of the product.
PROTECTIVE CLOTHING: Rubber apron. Rubber boots.
EYE PROTECTION: Full face shield with goggles underneath.

SECTION IX - SPECIAL PRECAUTIONS

STORAGE: Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feeding stuffs.
HANDLING: Avoid contact with skin, eyes and clothing.
Do not breathe fumes/spray. Handle in well ventilated work space.
OTHER PRECAUTIONS: Emergency showers and eye wash stations should be readily accessible.

SECTION X - TRANSPORTATION

DOT PROPER SHIPPING NAME:	Amines, Liquids Corrosive, N.O.S (Aliphatic amine)
DOT HAZARD CLASSIFICATION OR DIVISION:	8
IDENTIFICATION NUMBER:	UN 2735
PACKAGING GROUP:	III
LABELS REQUIRED:	Corrosive

THE INFORMATION HEREIN RELATES TO THE PRODUCT NAMED AND IS BASED UPON INFORMATION INTERNATIONAL COATINGS CONSIDERS TO BE ACCURATE. NO WARRANTY EXPRESSED OR IMPLIED IS INTENDED

A p p e n d i x E

Wisconsin Ownership Interests

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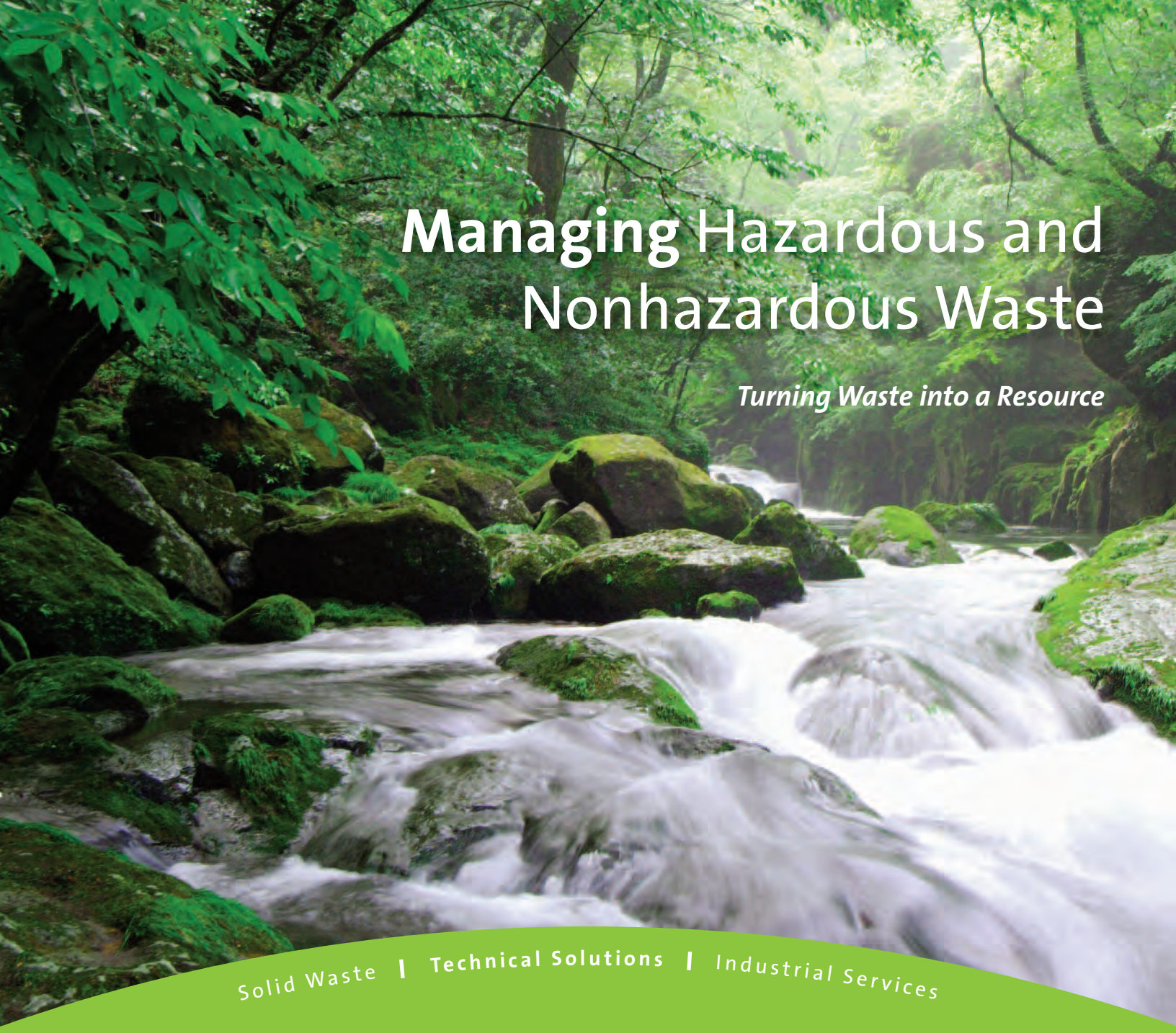

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Veolia maintains an excellent record of compliance with environmental regulations. This record is ready for inspection at any time. A culture of compliance is a way of life at Veolia, where we manage hazardous and nonhazardous waste with the utmost care. We follow procedures meticulously with our on-site teams, and continue to focus on the details throughout transportation, treatment and disposal. Our waste processing, storage and disposal locations are routinely audited and certified, and all disposal documentation is verified to assure compliance.

Financial Strength

Our parent is Veolia Environnement, a publicly owned company with over 150 years of experience delivering environmental solutions. The Paris-based company is the international leader in providing environmental services for waste, water, energy and transportation. With over $49 billion in revenue, it is the largest environmental services company in the world.

Technical Expertise

Our account, project and technical representatives understand hazardous and nonhazardous waste and the related regulatory requirements. Over 1,600 Veolia employees are ready to assist you in any way—from providing information about government regulations and answering technical questions regarding treatment alternatives, to training your employees and setting up disposal programs that save you time and money.

Excellent Health and Safety Record

Safety is critical in our business, and Veolia's safety record is strong. Our OSHA log summary shows a recordable injury case rate that is less than half the average for the North American Industry Classification System, and a lost time injury case rate that is less than 10% of the NAICS average. Similarly, our Experience Modification Rate, which is used by the insurance industry to determine premiums for workers compensation insurance and is based on past safety performance, is lower than 96% of our competitors. The reason for our excellent record is, simply, training excellence. Our field employees alone receive nearly twice as much training than is required by government regulations.

Innovation through Research

Veolia Environnement has established the only research and development program in the world dedicated to environmental services, with laboratories in France, Australia, Germany, the United Kingdom, and the United States. This program develops technical innovations for nonhazardous and hazardous waste processes, recovery and disposal, supporting Veolia's commitment to environmental sustainability. Locally, we use these innovative processes to improve our efficiencies in recycling electronic waste, metal scrap and organic solvents.

Reuse, Recycle, Reduce Waste

To ensure the most cost effective waste processing, we evaluate your waste streams to reduce overall waste volume and expense, while minimizing environmental impact. We always look for ways to reuse, recycle and reduce waste, including using waste as a product. Annually, Veolia transforms over 400 million pounds of waste into a resource through energy recovery, recycling and product substitution. Over 60 million pounds of that waste was converted into usable products, rather than considered hazardous waste under RCRA. Throughout all of our operations, we are pursuing waste treatment options to assure sustainability.

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Reclaimable organic solvents

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Not All Services Available

Sales/Processing/Other

Site Name	State	Phone	Customer Service Level	Sales Office	Incineration	Energy Recovery (Fuels Blending)	Recycling & Recovery	Stabilization/Landfill	Lighting & Electronic Recycling	Permitted TSDF	10 Day In Transit
Phoenix	AZ	602-233-2955	●	○					○	○	○
Azusa	CA	800-395-6726	●	○		○	○			○	○
Fremont	CA	800-325-2382	●	○							○
Huntington Beach	CA	800-303-6320	●	○							○
Richmond	CA	800-243-2382	●	○						○	
Sacramento	CA	916-379-0872	●	○							○
San Diego	CA	800-956-5782	◐	○							○
Henderson	CO	303-289-4827	●	○		○	○			○	○
Newington	CT	860-667-6003	●	○							
Tallahassee	FL	850-877-8299	◐	○					○	○	
Morrow	GA	800-443-5645	●	○						○	○
Lombard	IL	800-667-2387	◐	○							
Lombard	IL	630-364-1760	◐				○				
Sauget	IL	618-271-2804	●	○	○					○	○
East Chicago	IN	800-548-4458	●	○							○
Indianapolis	IN	317-917-3904	●	○							
Louisville	KY	502-375-2386	●	○							○
Baton Rouge	LA	225-293-4600	◐	○							
Marlborough	MA	800-354-2382	●	○							
Stoughton	MA	781-341-6080	◐	○					○		
Livonia	MI	734-632-8459	●	○							○
Blaine	MN	888-887-9457	●	○							○
Mooresville	NC	704-662-3044	●	○							○
Creedmoor	NC	919-528-3996	●	○						○	○
Flanders	NJ	800-426-2382	●	○						○	○
Middlesex	NJ	732-469-5100	●	○		○	○			○	○
Colonie	NY	518-382-0246	●	○							○
Tonawanda	NY	716-879-0600	●	○							○
Wantagh	NY	516-221-8300	●	○							○
North Jackson	OH	330-538-0600	●	○			○				○
West Carrollton	OH	937-859-6101	●	○		○	○			○	○
Philadelphia	PA	800-423-2382	●	○							○
Wampum	PA	724-535-5777	◐	○			○			○	○
York	PA	888-877-2387	●	○							○
Gurabo	PR	787-744-0070	●	○							○
Baytown	TX	800-624-9302	●	○							○
Port Arthur	TX	409-736-2821	●	○	○					○	○
North Salt Lake	UT	801-294-7111	●	○							○
Fredericksburg	VA	540-368-9780	●	○							○
Richmond	VA	804-233-6980	●	○							○
Kent	WA	425-272-0772	●	○							○
Vancouver	WA	360-260-0882	●	○							○
Greenville	WI	920-757-5265	◐	○							
Menomonee Falls	WI	800-255-5092	●	○		○		○		○	○
Port Washington	WI	262-243-8900	●	○					○	○	○
Poca	WV	304-759-1055	●	○							○

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  - High Hazard Chemicals
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  - Ethanol Recovery/Secure Brand Destruction
  - Solvents and Thinners
- Remediation
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  - Cylinder Sampling, Identification and Disposal
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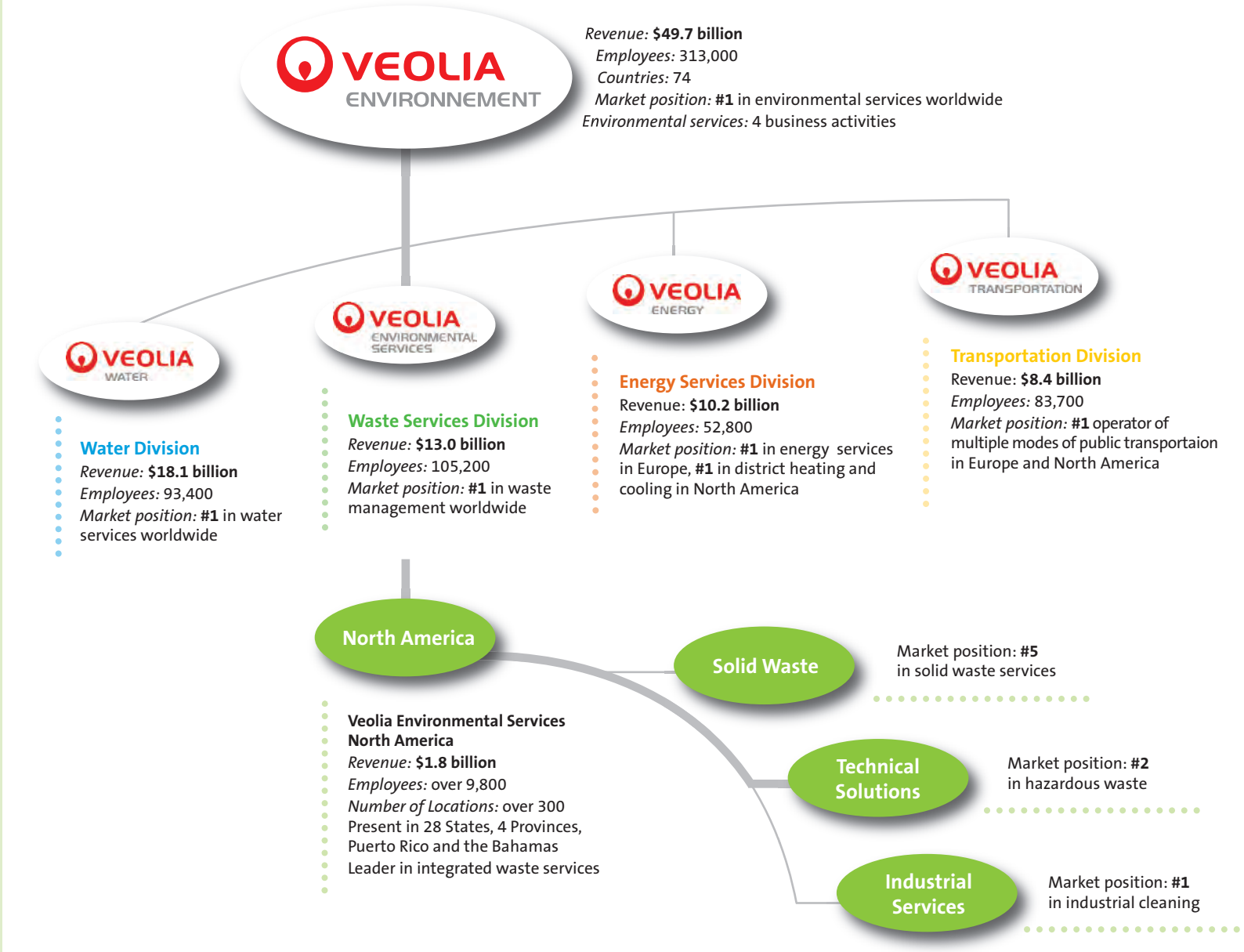

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A p p e n d i x F

Environmental Assessment and Wetlands Investigation Reports

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May 21, 1997

Mr. Kevin McGrath
AETS - Controlled Waste Division
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Re: 10-Year Licensing Environmental Review
Controlled Waste Division
Rust Project No. 100964

Dear Mr. McGrath:

This letter report shall serve as documentation of our review of your environmental assessment and wetlands investigation report as required for the 10-year licensing renewal of the Controlled Waste Division facility.

INTRODUCTION

In order to conduct our review, Rust performed the following activities.

1. Reviewed the "Environmental Assessment, Chemical Waste Management, Inc., Controlled Waste Division," SEC Donohue, May 1992.

2. Reviewed the "Routine On-Site Wetland Investigation NR 103 Water Quality Standards for Wetlands, Chemical Waste Management, Inc., Controlled Waste Division," SEC Donohue, May 1992.

3. Conducted a site visit to the Controlled Waste Division on March 13, 1997, to review site conditions as related to the two cited reports, and perform general observations of the facility operations.

4. Conducted telephone conversations with Controlled Waste Division personnel regarding environmental compliance.

SITE VISIT

On March 13, 1997, I performed a site visit to the Controlled Waste Division facility. During the course of my visit, I made observations regarding facility compliance with regard to the following criteria:

- Surface water drainage and run-off control.
- Containment berms and structures.
- General facility operations.

Surface water drainage and run-off control. The facility is graded so that all run-off from precipitation drains overland and through a number of drainage swales to a retention basin located off the southeast corner of the facility. This management system limits the impacts of the facility on downstream receiving waters by reducing sediment discharge and moderating the discharge of run-off. Since all site run-off is routed through the basin, the potential for downstream contamination due to an accidental spill is minimized. Erosion from the facility is minimized by maintaining vegetation on all unpaved areas. Stormwater discharge from the facility is regulated under a General Industrial Storm Water Discharge permit No. WI-S067857.

Containment berms and structures. Secondary containment structures are maintained around all hazardous waste processing areas. See Photograph 1. These contain all potential spills so that there are no contaminants released into the environment. Contaminated and potentially contaminated run-off is stored in tanks and reused in the on-site stabilization processes or shipped off-site for treatment and disposal. To further minimize the potential for contamination of run-off, roll-off boxes stored outdoors are covered to reduce contact with precipitation. See Photographs 2 and 3.

General facility operations. Controlled Waste Division is a licensed RCRA treatment and storage facility. In addition, it serves as a licensed transporter of both hazardous and non-hazardous waste. The main operations of the facility consist of:

- Container storage and processing.
- Liquid waste solidification.
- Hazardous waste processing and stabilization.

These operations are conducted under a number of State and Federal licenses.

The stabilization and solidification processes are conducted inside enclosed buildings. Any air discharges are routed through appropriate air pollution control devices to reduce or eliminate environmental contamination. The baghouse for the stabilization unit is operated under a WDNR Air Permit No. 96-EJD-224 issued for construction on November 22, 1996. Photograph 4 shows the interior of the stabilization building.

ENVIRONMENTAL ASSESSMENT

Without affecting the basic conclusion of the assessment, namely that the "overall environmental and physical impacts are not anticipated to be significant.", three updates to the report are noted.

1. The proposed revisions to the facility described in the 1992 assessment have been completed. The current layout of the site is reflected in Figure 3b, which was formerly noted as the proposed site layout.

2. The General Industrial Storm Water Discharge Permit No. WI-S067857 should be added to the permits listed in Appendix A.

3. The WDNR Air Permit No. 96-EJD-224 should be added to the permits listed in Appendix A.

In other respects, the physical and environmental settings and potential impacts for the facility remain as described in the 1992 assessment.

NR 103 WATER QUALITY STANDARDS FOR WETLANDS

Stormwater from the facility is routed into a retention basin through a series of swales and overland flow. This is the same basic stormwater management regime described in the 1992 report. No water from the facility is discharged to the adjacent wetlands. The facility expansion and current operations do not change the conclusion of the report that "The water quality standards for wetlands, pursuant to NR 103 Wis. Adm. Code, will not be impacted during or after facility expansion."

CONCLUSION

The Controlled Waste Division facility is in compliance with both the requirements for an environmental assessment as described in NR 680.06(6), and the facility is in compliance with the water quality standards for wetlands as described in NR 103.

If you have any questions regarding these matters, please feel free to contact me.

Sincerely,

Donald F. Pirrung, P.E.
Project Manager

L:\WORK\WPMISC\TRANS\LETTERS\AETS.MJZ

1. Interior of Non-Hazardous Processing Building, showing secondary containment structures.

2. Storage of roll-off boxes with waste.

3. Storage of roll-off boxes with waste.

4. Interior of Stabilization Building.

ENVIRONMENTAL ASSESSMENT

FOR:

Chemical Waste Management, Inc.

Controlled Waste Division

W124 N9451 Boundary Road

Menomonee Falls, WI 53051

Submitted by:

SEC DONOHUE

Oak Brook, IL

May, 1992

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EXECUTIVE SUMMARY

The Controlled Waste Division facility proposes to expand their existing hazardous waste storage and handling facilities in Menomonee Falls, Wisconsin. The purpose of the facility is to collect, consolidate, temporarily store and treat hazardous and non-hazardous waste generated off-site and transport to other off-site treatment and/or final disposal facilities.

Pursuant to requirements of Specific Condition No. 53 of the Wisconsin Department of Natural Resources April 9, 1991 Waste Stabilization Process Variance, Controlled Waste Division submitted to WDNR a modification of the facility Feasibility Report and Plan of Operation (FRPO) on August 9, 1991. The purpose of the modification was to incorporate the Waste Stabilization Process and associated ancillary activities, including an RCRA Storage Unit, into the facility Hazardous Waste License No. 03135.

Overall requirements for hazardous waste treatment/disposal currently exceeds in-state capacity. In the future, competition for remaining hazardous waste disposal capacity is expected to increase. The additional treatment and storage capacity of Controlled Waste Division will be responsive to this need. The overall environmental impact from previous operations and the proposed modifications from this application are not expected be significant.

STATUTORY AUTHORITY AND ZONING

The statutory authority and relevant local, state, and federal permits required for Hazardous Waste Operation Licenses are documented in Appendix A.

SITE LOCATION

The regional and local site location is shown in Figure 1. Controlled Waste Division is located in southeastern Wisconsin, in the metropolitan Milwaukee area, within the Village of Menomonee Falls. The facility is approximately 15 miles northwest of the center of Milwaukee.

The Controlled Waste Division site, which is approximately 7.53 acres in size, is located in the southeast 1/4 of the northeast 1/4 of Section 1, T.8.N., R.20.E., Village of Menomonee Falls, Waukesha County, Wisconsin. The site is accessible from the Milwaukee area by U.S. Highway 41 and State Highway 145.

SITE ZONING

The facility is currently zoned for industrial use, which is consistent with existing and proposed site modifications. Figure 2(a-d) exhibits local zoning maps.

COST AND FUNDING

The cost and funding of the project modifications will be incurred by Chemical Waste Management, Incorporated.

PROPOSED PHYSICAL CHANGES

MATERIAL AND SOIL EXCAVATION AND PLACEMENT

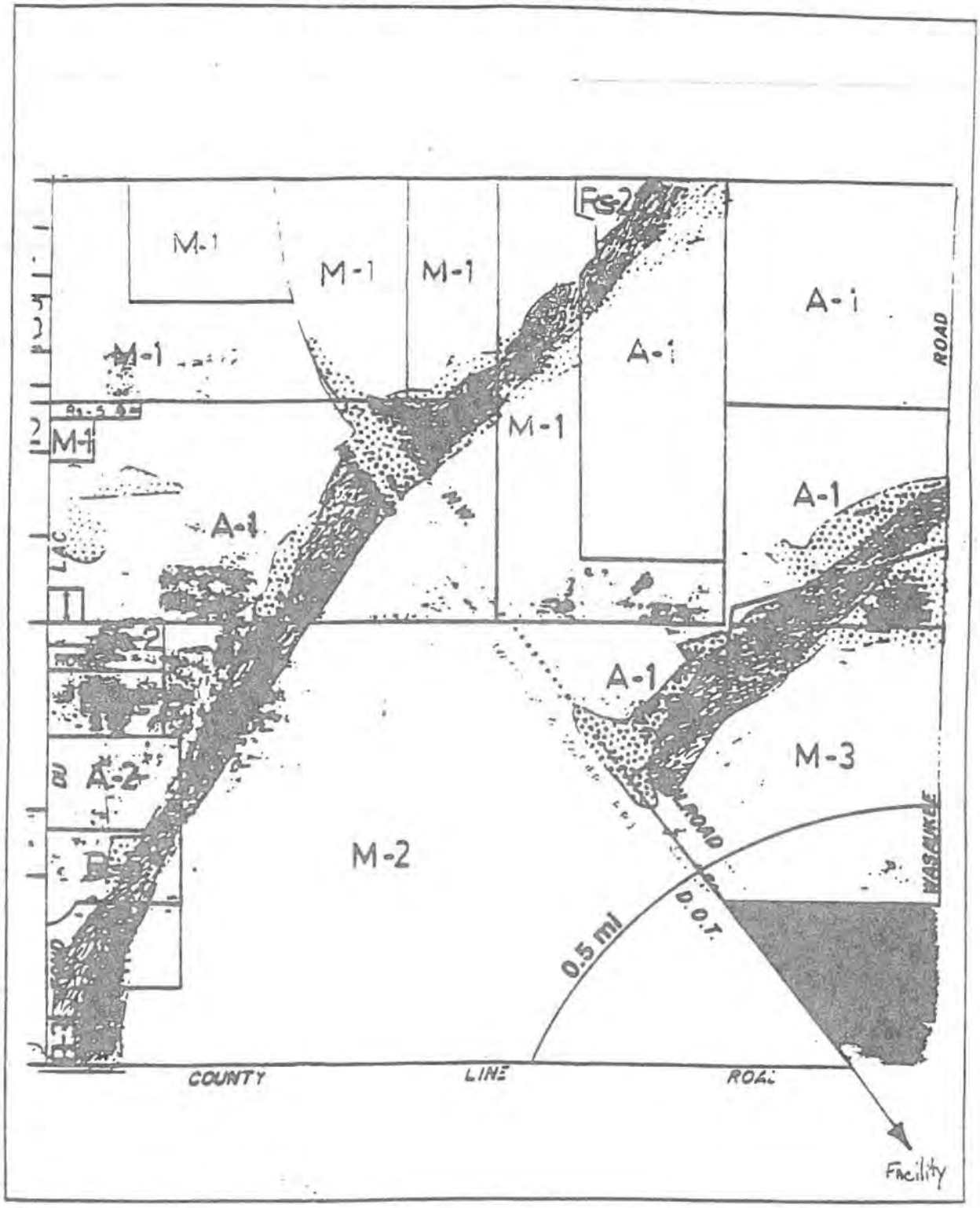
Material excavation and soil removal on the project site will be limited to the areas of facility footing installation. The quantity and source of imported materials are subject to construction contractor's needs. To reach the sub-base grades, soil placement will be minimal since little initial soil removal would be required.

ACCESS ROADS

Access roads are asphalt paved and currently exist on the project site. No additional roadway construction is anticipated.

Figure 2 a

Zoning Map for Village of Germantown



Zoning Districts

A-1	Agricultural	M-2	General Industrial
A-2	Agricultural	M-3	Special Use Industrial
B-3	General Business	RD-2	One Family + 2 Family Residential
B-5	Highway Business	RS-1/RS-2	Single Family Residential
I	Institutional		Floodway / Wetlands
M-1	Light Industrial		

N

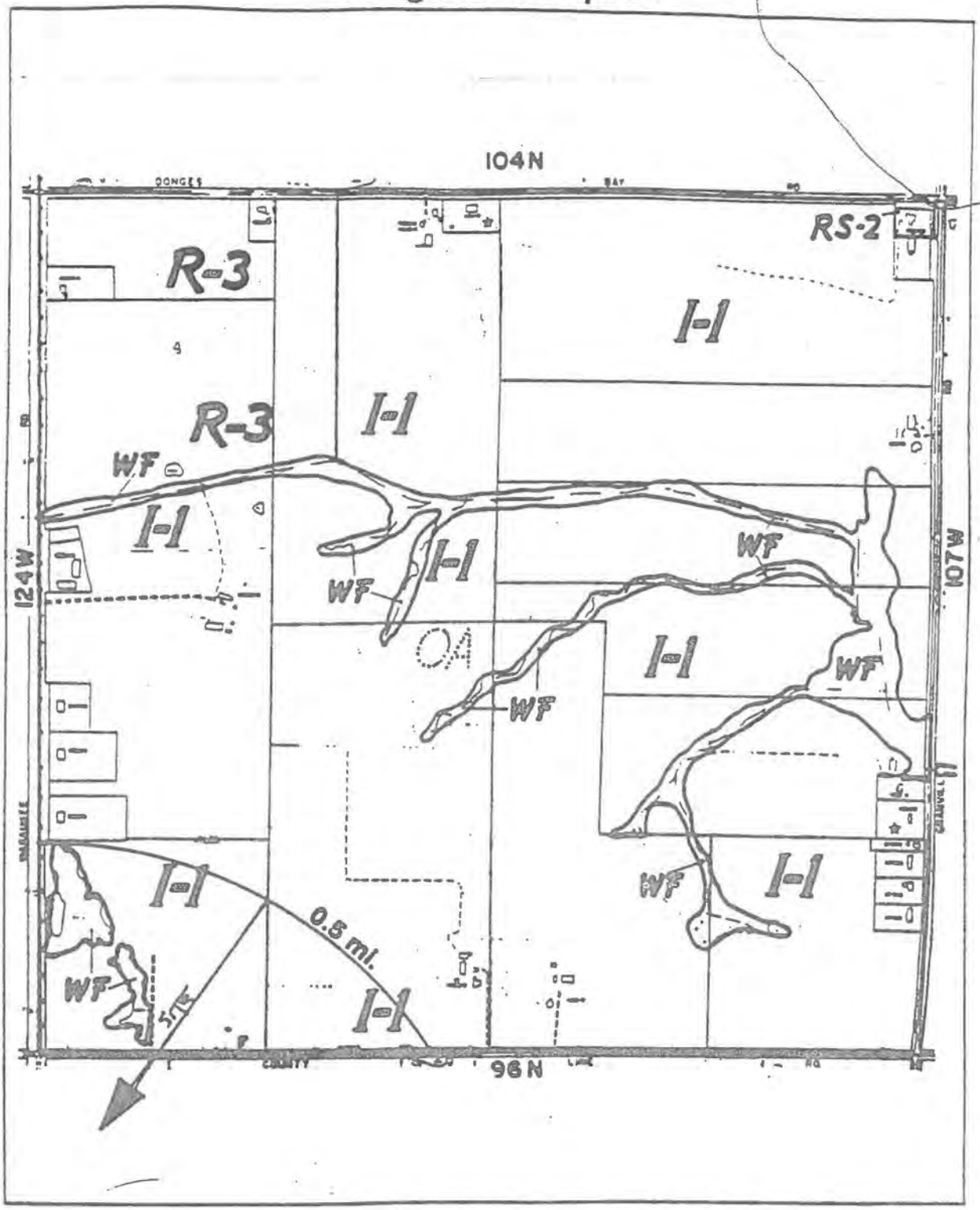
0 400 800 FEET

SCALE

S910075-2

Figure 2 b

Zoning Map for Village of Mequon



Zoning Districts

I-1	Industrial
OA	Agricultural
R-3	County Home
RS-2	Single Family Suburban
WF	Wetlands and Floodplains

N

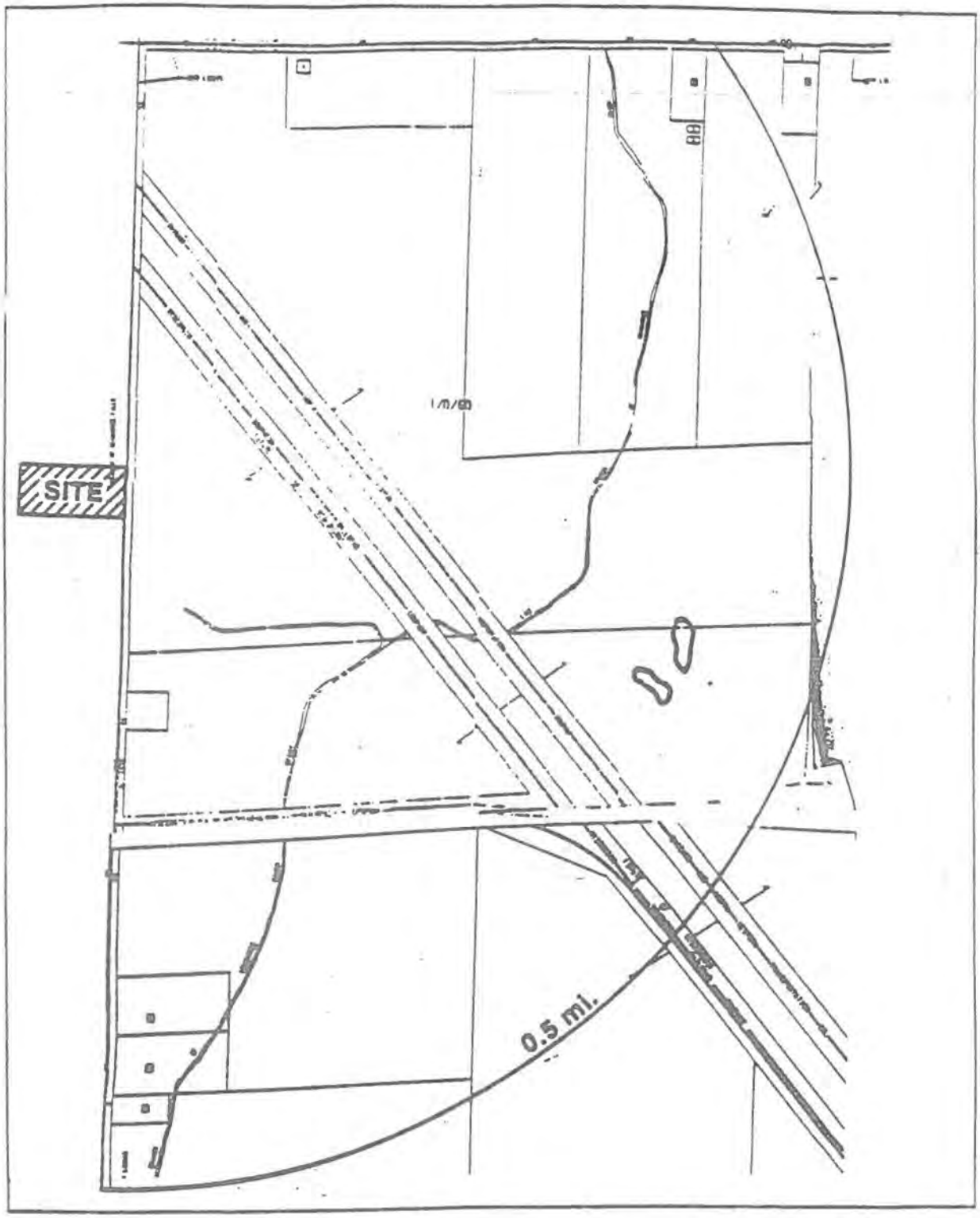
0 400 800 FEET

SCALE

S910075-4

Figure 2c

Zoning Map for Village of Milwaukee



Zoning Districts

I/D/60	Industrial–60 Foot Height Limit
▪	Single Family Residence
4	Four Family Residence
A	Accessory Building

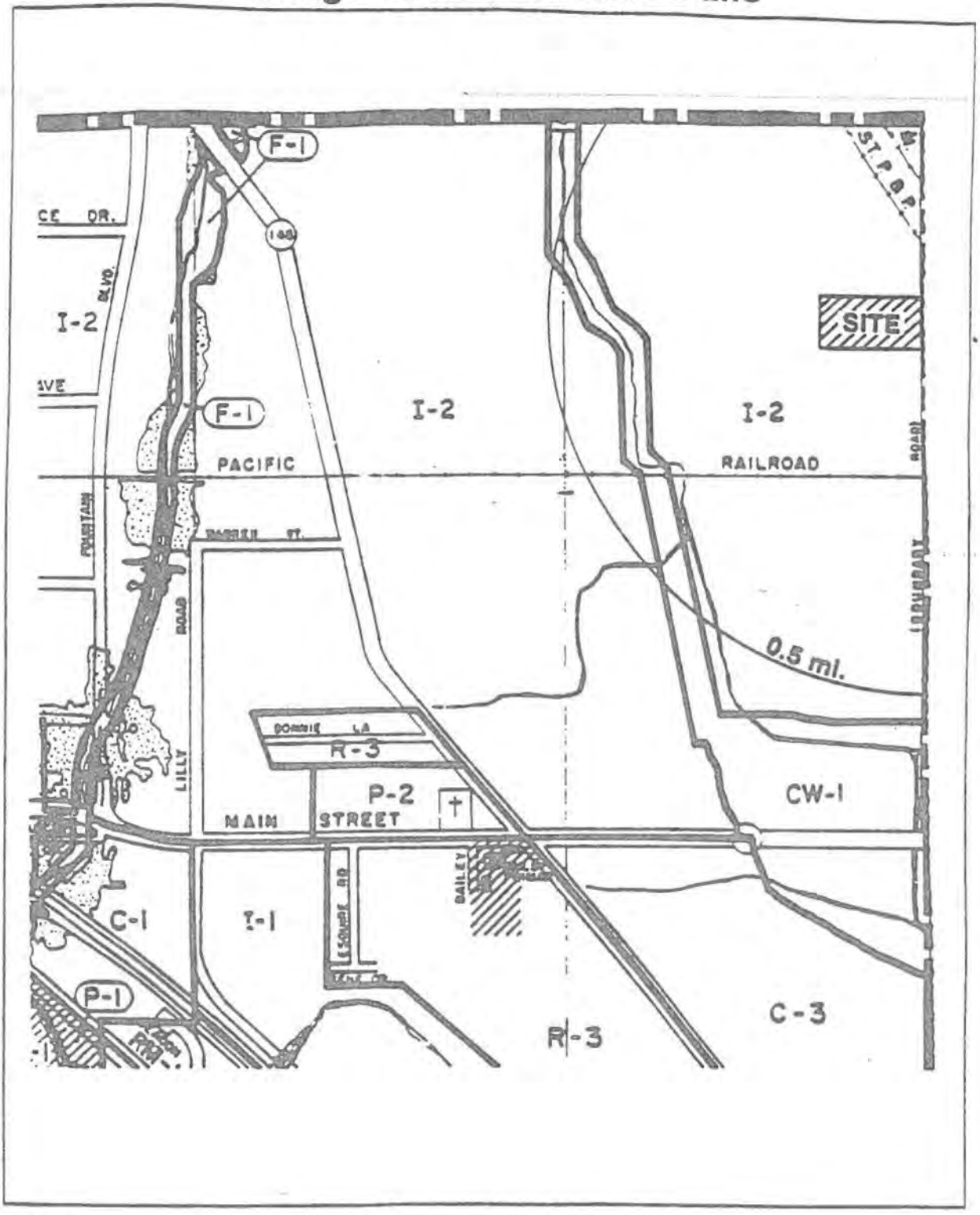
N

0 1/8 1/4 mi.

SCALE

Figure 2 d

Zoning Map for Village of Menomonee Falls



Zoning Districts

C-1	Neighborhood Business	I-2	Heavy Industrial
C-3	Planned Commercial - Residential	P-1	Park and Open Space
CW-1	Conservancy - Wetlands	P-2	Institutional
F-1	Floodway	R-3	Single Family Residential
I-1	Light Industrial		Government Owned Land

N

0 660 1320 FEET

SCALE

5910075-1

SOIL EROSION AND RUNOFF CONTROL

Soil erosion and runoff control structures are already in place. A swale system and retention basin protect down-gradient and adjacent land areas from soil deposition and flooding for any increased amounts of runoff that site modifications may create. All unpaved areas are vegetated to minimize erosion.

AQUATIC RESOURCES

There are no wetlands, lakes, streams, rivers or other aquatic resources on the site. Due to the nature of existing facility, site modifications will not effect groundwater supplies.

FACILITY CLOSURE

Closure policies are documented in the FRPO. The closure of the facility could allow the site to return to natural states. No irreversible impacts from this facility are envisioned.

Surface water runoff will continue to be collected within retention basins and overflow structures will allow for gradual release of excessive amounts of collected runoff.

LOCATION OF BUILDINGS

Figures 3a and 3b detail the existing and proposed facility layouts respectively. The layout of operating units, other buildings and structures, fences and other features are described.
The physical layout (figure 3a) of the existing facility currently consists of:

1. A Container Storage Unit
2. A Non-hazardous Waste Processing Building
3. Roll-off Box/Lugger-Box Storage Unit
4. Waste Stabilization Unit
5. An Administration Building and

6. A Maintenance Building.

The layout of the proposed modified facility is shown in figure 3b. This expanded facility will consist of the following regulated units:

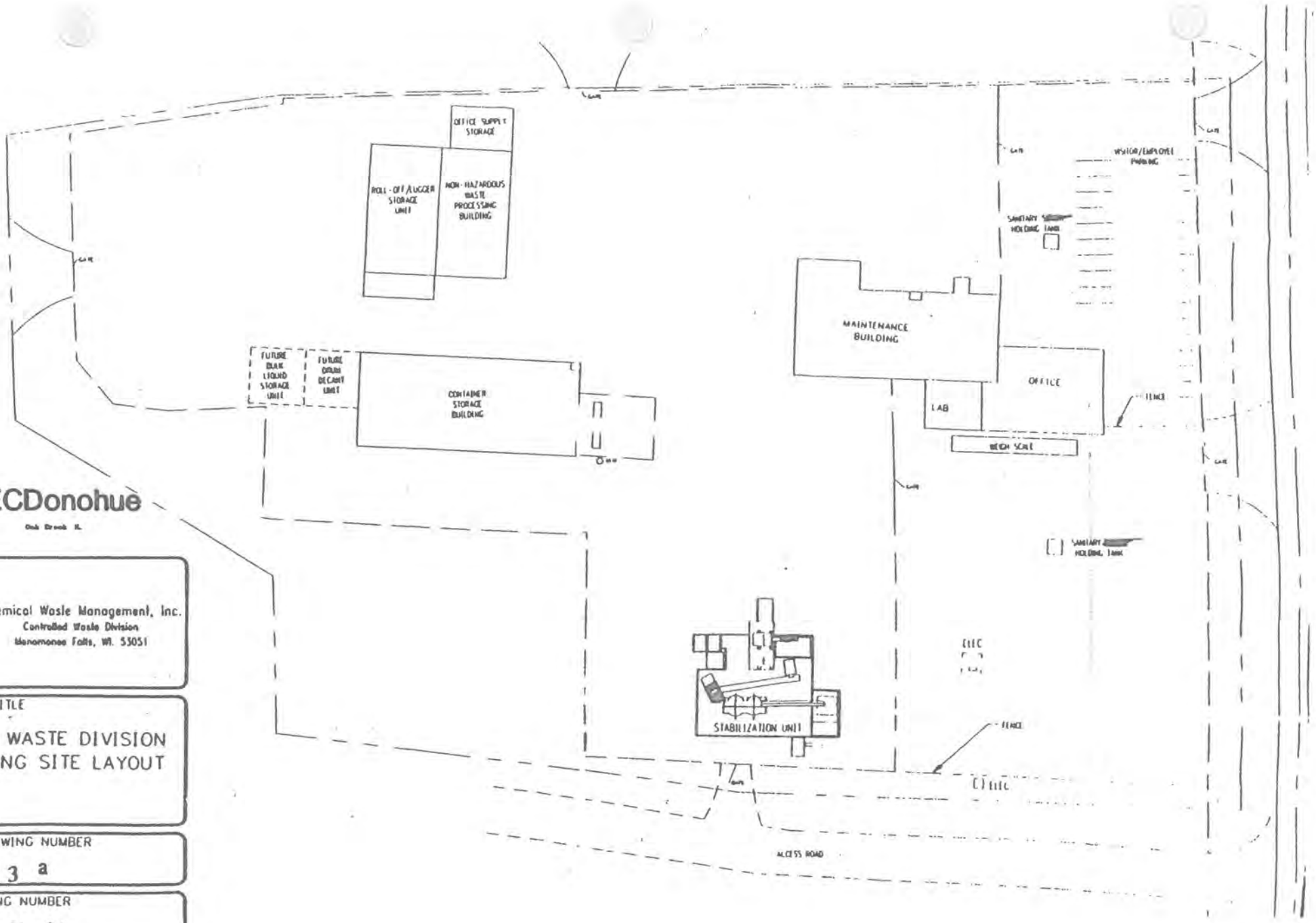
1. A Container Storage Unit
2. A Drum Repack/Bulking/Decant Process Unit
3. A Bulk Liquid Storage Unit
4. A Waste Stabilization Unit
5. Three Roll-Off Box/Lugger Box Container Storage Units.

Non-regulated units, including the administration and maintenance building will continue to be present in the modified facility layout. A truck scale will be installed at the facility. A perimeter fence, with seven gates, will also surround the facility.

EMISSIONS AND DISCHARGES

When the facility is fully developed, it is expected that truck traffic will average up to an additional three (3) trucks per day. These trucks will include (but are not limited to) van, trailer, flatbed, tank and lugger-box trucks having a gross (loaded) weight less than 80,000 pounds. All roadways on the facility are asphalt paved and will be designed to accommodate vehicles expected during normal daily operations. Truck staging on Boundary Road will not be permitted. Since traffic will not appreciable increase, emissions of diesel exhaust, odors and gases associated with the modifications will only increase slightly during the construction operations and will then return to levels near those experienced during current daily operations. Long-term impact of increased traffic are negligible. There are no other anticipated changes with the development of the facility.

The overall air quality impact from this operation is expected to be minimal.



SECDonohue

Oak Brook IL

Chemical Waste Management, Inc.
Controlled Waste Division
Menomonee Falls, WI. 53051

DRAWING TITLE

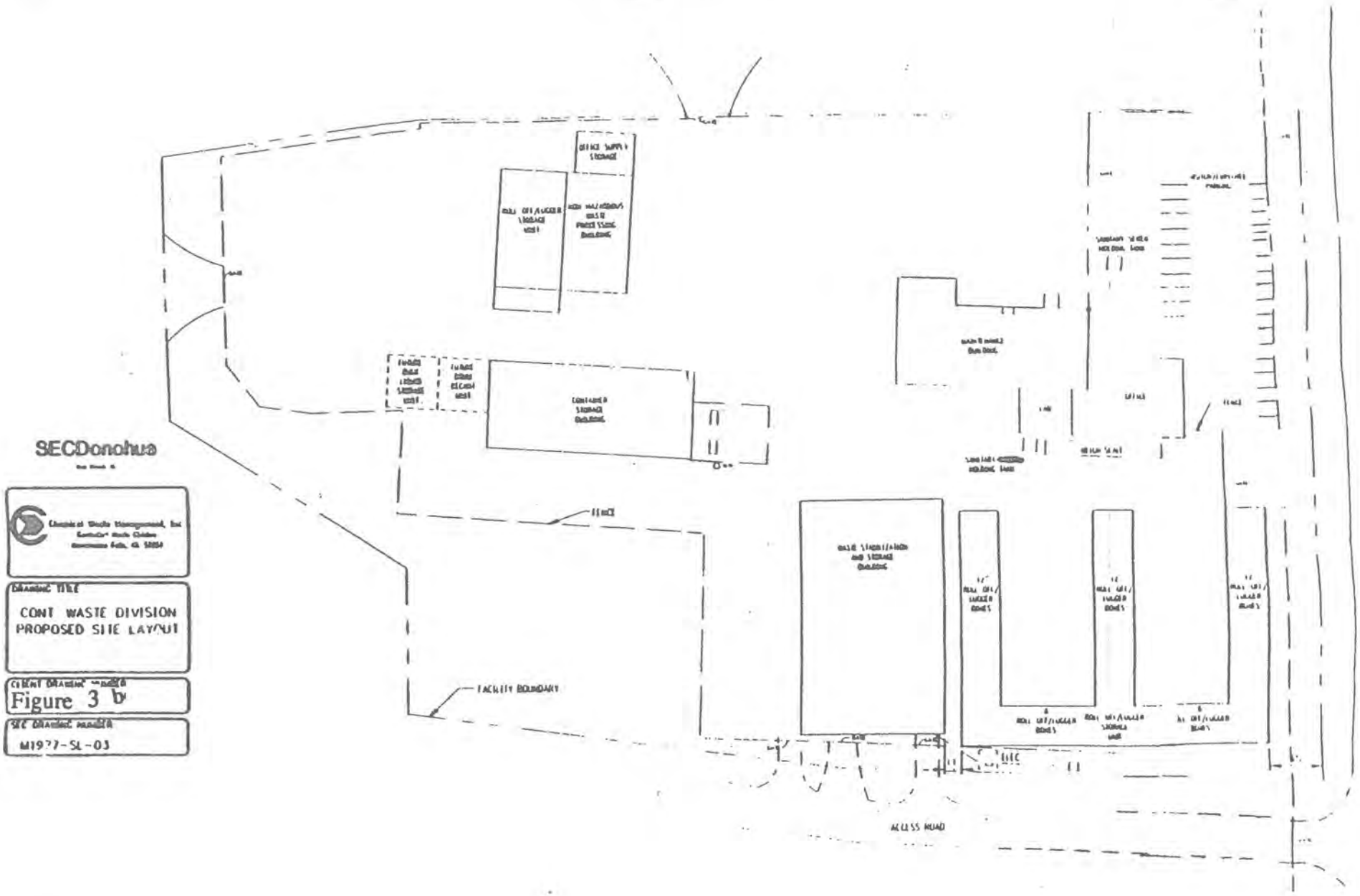
CONT. WASTE DIVISION
EXISTING SITE LAYOUT

DRAWING NUMBER

FIGURE 3 a

DRAWING NUMBER

M1977-SL-04


SECDonohue
Chemical Waste Management, Inc
DRAWING TITLE
CONT WASTE DIVISION
PROPOSED SITE LAYOUT
CLIENT DRAWING NUMBER
Figure 3 b
SEC DRAWING NUMBER
M1977-SL-03
FACILITY BOUNDARY
ACCESS ROAD

EXISTING ENVIRONMENTAL SETTING

LAND USE

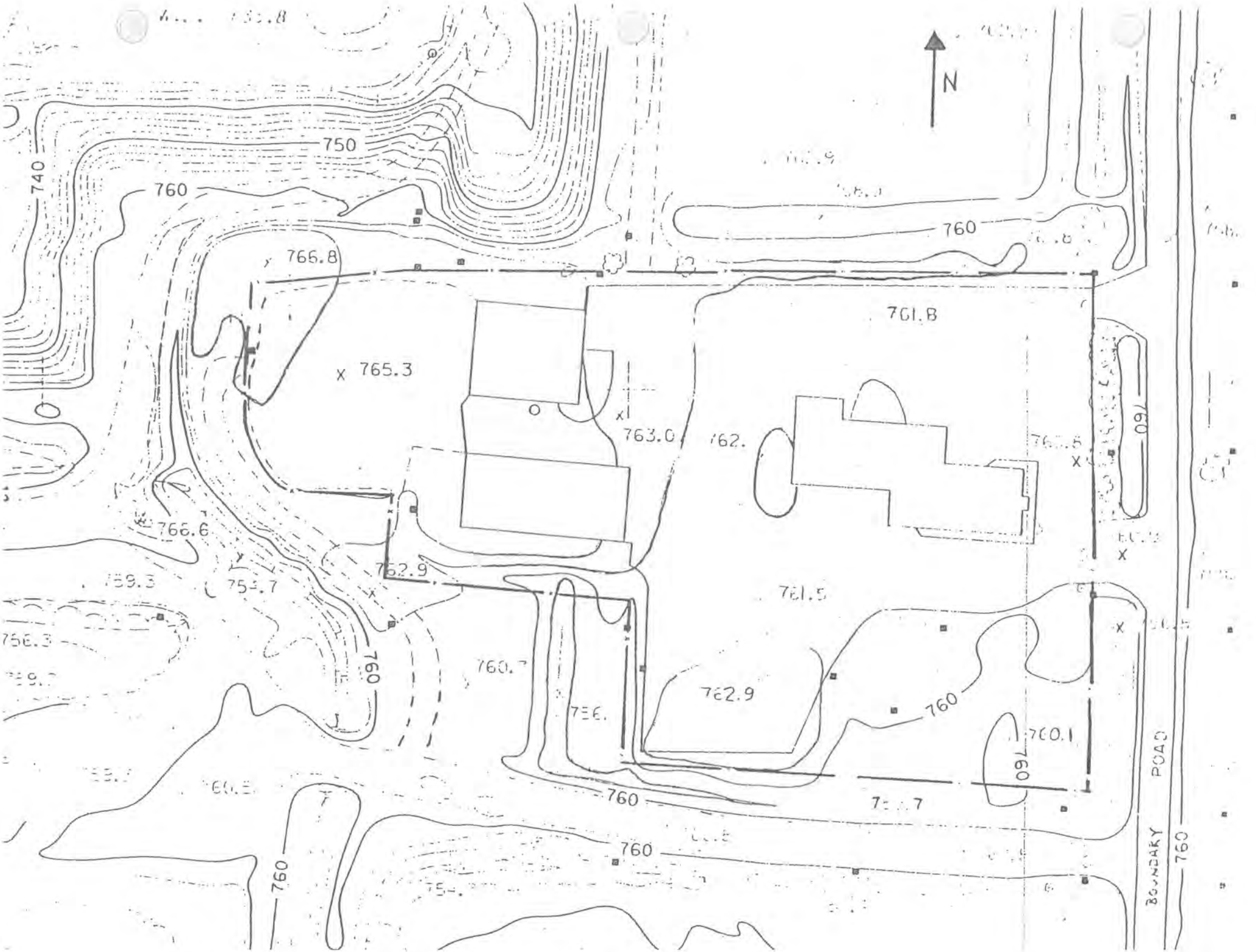
The site is bounded to the west and north by Parkview and Omega Landfills, respectively. To the south is located an abandoned gravel pit (Palustrine open water wetland area). To the east of the site is Boundary Road and open field/wetland area. The surrounding area is predominantly rural in nature with five (5) residential houses and commercial subdivisions of Menomonee Falls begin about 1-1/2 miles from the facility. Portions of four (4) communities lie near the facility - Milwaukee, Mequon, Germantown and Menomonee Falls.

TOPOGRAPHY

The Controlled Waste Division facility and the surrounding area is gently sloping to near level, except where landfill operations have modified the original topography. Regional surface elevations range from 530 feet MSL along Lake Michigan to 1,320 feet MSL in the Kettle Moraine area of southwestern Washington County. The facility surface elevations range from 757 feet MSL along the east-central boundary of the site to 765 feet MSL within the western portion of the site (Figure 4).

GEOLOGY

The subsurface geology of the facility consists primarily of silty clay interbedded with a series of sand seams overlying dolomitic limestone bedrock. The Silarian Age Niagaran dolomite is white to gray, moderately fractured and several hundred feet thick. Underlying the Niagaran dolomite is Ordovician Age Maquoketa shale. This shale is blue-gray dolomitic shale which may contain beds of dolomite up to 40 feet thick in the area of the project site. Underlying the Maquoketa shale is a thick sequence of limestones, dolomites and sandstones. The Precambrian basement rock consists of undifferentiated, crystalline, metamorphic and igneous rocks.


N
750
740
760
766.8
765.3
763.0
761.8
766.6
762.9
761.5
762.9
760.1
BOUNDARY ROAD

SOILS

The soils of the area formed mainly in material laid down by glaciation. The project area is located within the Ozaukee-Moxley-Mequon Soil Association. These soils are well drained to somewhat poorly drained with a subsoil of silty clay loam and silty clay; formed in thin loess and silty clay loam glacial till, on moraines. However, much of the facility has been previously altered by grading and filling operations with much of the site's surface area being paved or overlain with Clayey Land fill material.

WATER RESOURCES

Groundwater flow is generally to the south towards the Menomonee Falls River. There are no natural wetland areas on the site. However, a swale system and stormwater retention basin is present on the southwest corner of the project site. All surface water runoff on the site is relayed, via the swale system, into the retention basin. This retention basin is labelled "W" on the U.S.D.A. Wetland Inventory. The project area is not within the 100-year flood zone (Flood Insurance Rate Map #550483 0005 C) as shown in Figure 5. Groundwater infiltration is anticipated to be minimal. All areas where hazardous waste are managed are either enclosed in buildings or adequately contained. Any contaminated rainwater would be properly disposed. All domestic wastewater is hauled off-site for proper disposal.

CLIMATE

The regional climate is modified somewhat by Lake Michigan. The effects of the lake are most prominent in the spring and early summer, when prevailing northeasterly winds are off the lake. Prevailing winds are from the south during mid-summer. During the remainder of the year the prevailing winds are predominantly from the west. Figure 6 provides a wind rose for the area.

FIGURE 5

Floodplain Map

CHEMICAL WASTE MANAGEMENT - CONTROLLED WASTE DIVISION FACILITY

MENOMONEE FALLS, WI

SEC DONOHUE

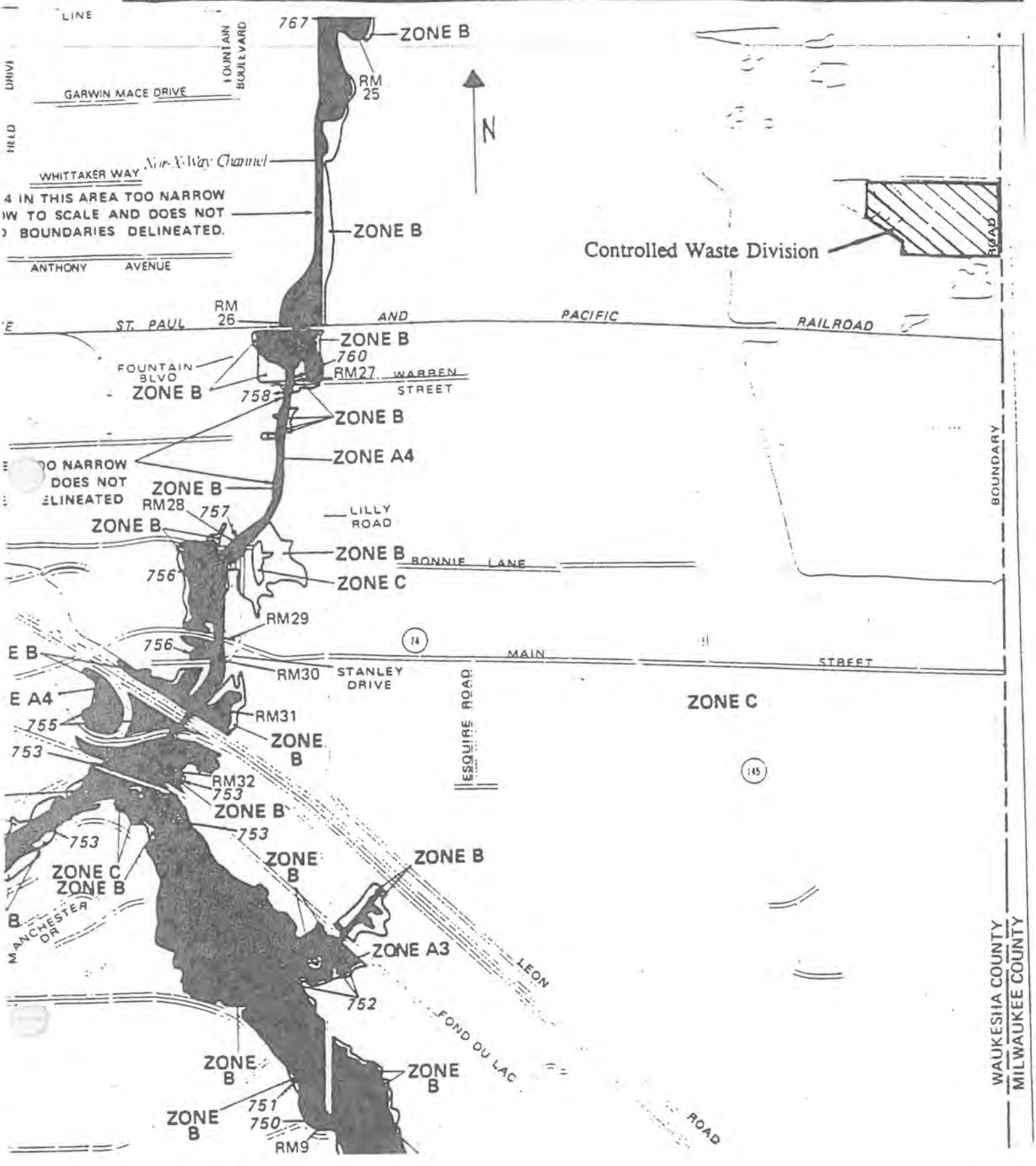


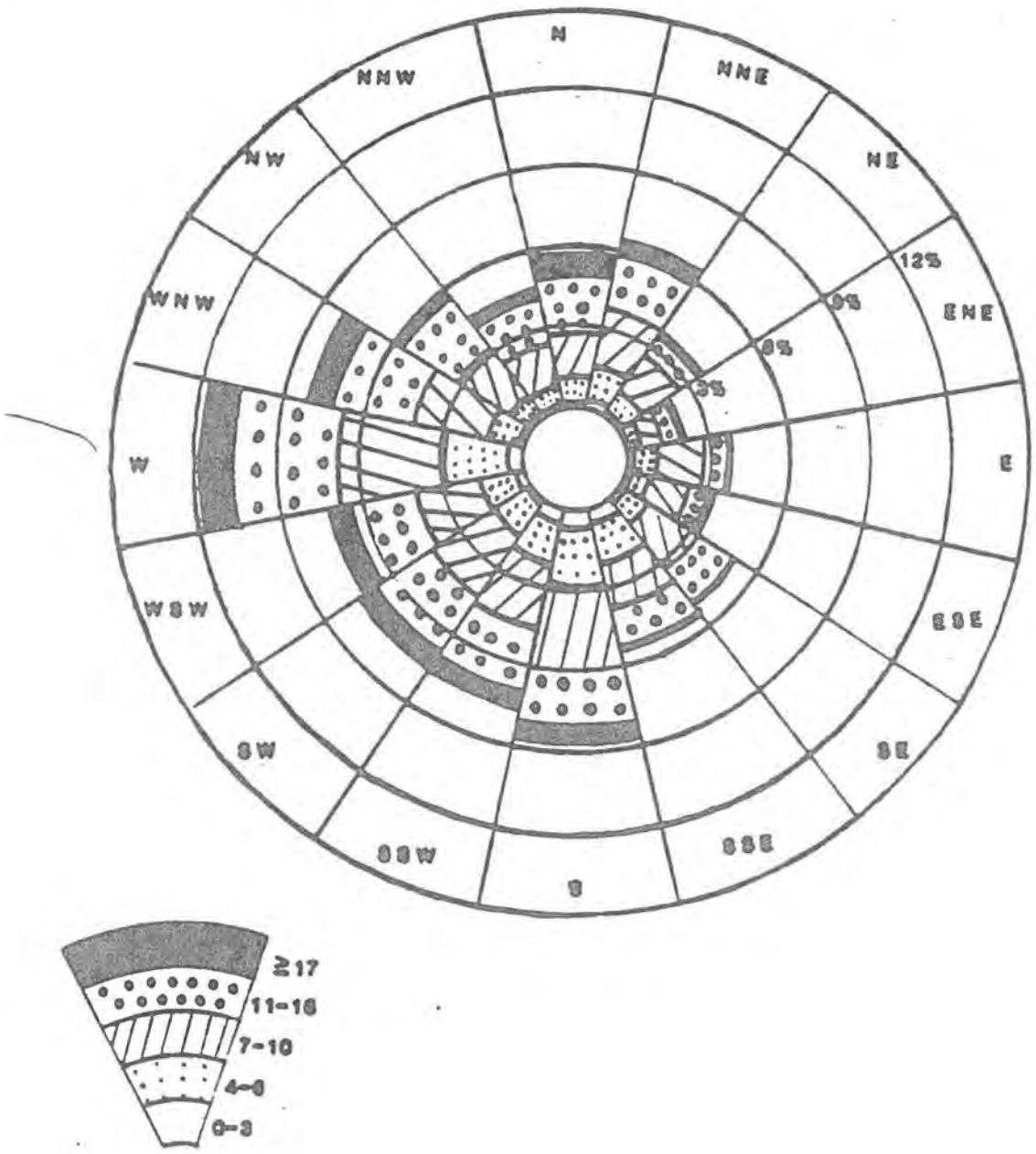
FIGURE 6

WIND ROSE

SEC DONOHU

CHEMICAL WASTE MANAGEMENT -- CONTROLLED WASTE DIVISION FACILITY

MENOMONEE FALLS, WI



WIND ROSE

Winters are long, cold and snowy. Summer is warm, with several periods which are hot and humid. The average yearly temperature is 46.9°F and the average yearly amount of precipitation is 30.07 inches.

AQUATIC/TERRESTRIAL RESOURCES

Since facility operations have been occurring since 1981, vegetative diversity is very limited on the site. Dominant plant species include Smooth Brome grass (Bromus inermis) and various clovers.

The use of the site by wildlife is also limited within the project area. Lack of vegetative diversity and the site's isolation reduces the site's habitat viability.

Retention basins provide limited habitat for migratory birds, song birds, aquatic and terrestrial insects, and small animals.

Two wetland areas are located adjacent to the site, (Figure 7). To the west is a palustrine emergent wetland area and to the south is a palustrine open water wetland area. These wetlands store runoff, improve water quality, slow erosion processes, prevent flooding and provide valuable and diverse plant and animal habitat.

ENDANGERED AND THREATENED SPECIES

Endangered and threatened species were not located on-site or in the surrounding area. Appropriate contacts with state officials were made. Written confirmation will be appended to this report when received.

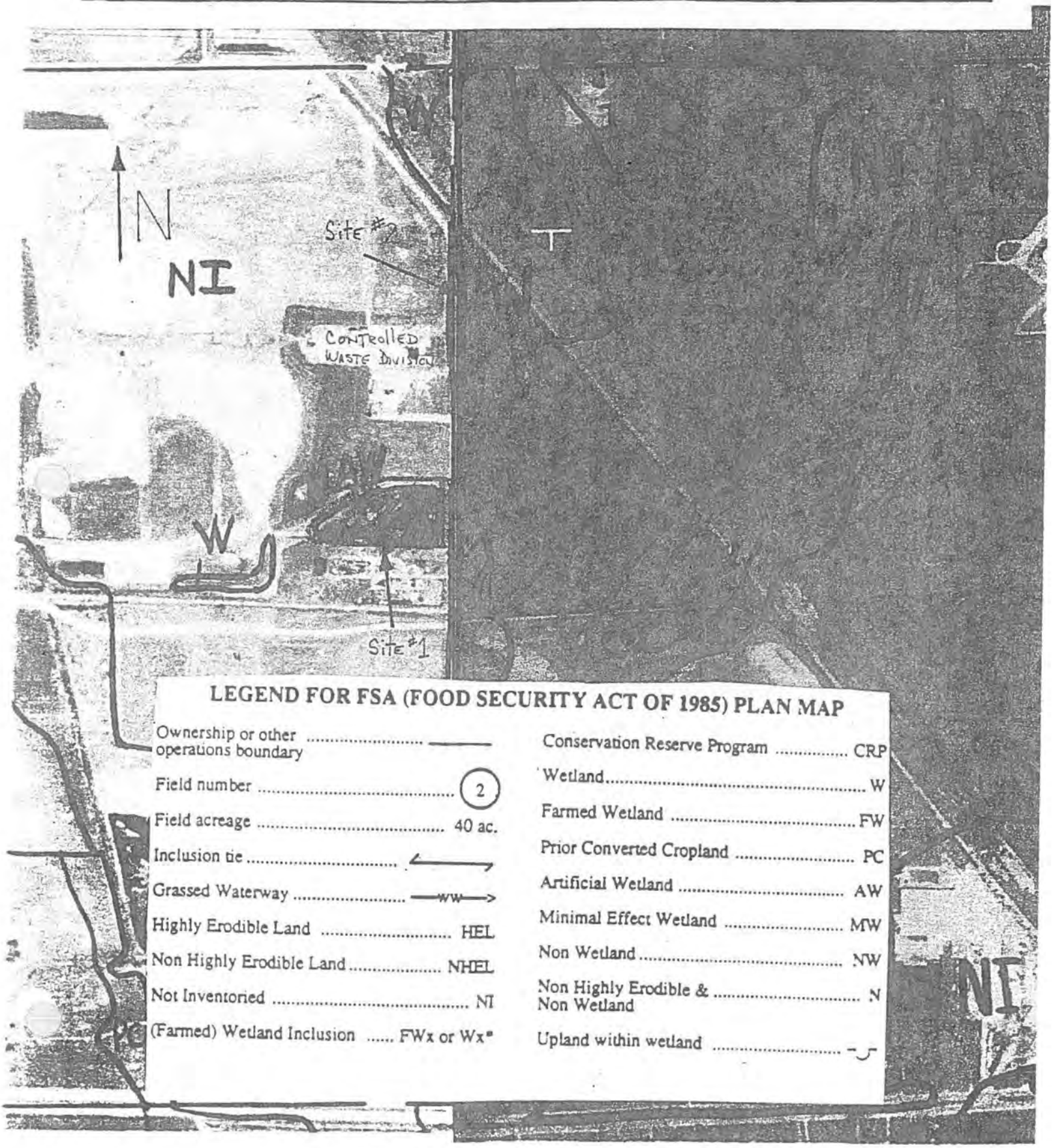
FIGURE 7

U.S.D.A. Wetland Aerial Photograph

CHEMICAL WASTE MANAGEMENT - CONTROLLED WASTE DIVISION FACILITY

MENOMONEE FALLS, WI

SEC DONOHUE
Environment & Infrastructure



LEGEND FOR FSA (FOOD SECURITY ACT OF 1985) PLAN MAP

Ownership or other operations boundary	———	Conservation Reserve Program	CRP
Field number	(2)	Wetland	W
Field acreage	40 ac.	Farmed Wetland	FW
Inclusion tie	⟷	Prior Converted Cropland	PC
Grassed Waterway	——WW——→	Artificial Wetland	AW
Highly Erodible Land	HEL	Minimal Effect Wetland	MW
Non Highly Erodible Land	NHEL	Non Wetland	NW
Not Inventoried	NI	Non Highly Erodible & Non Wetland	N
(Farmed) Wetland Inclusion	FWx or Wx*	Upland within wetland	⌐⌐

SPECIAL RESOURCES

There are no known recreational, historical or archeological areas on the site. The WDNR Bureau of Endangered Resources has communicated that no officially designated stretch of wild or scenic rivers or officially designated critical habitats are on or near the project area.

There is no prime farmland on the site. However, the predominantly rural nature of the surrounding area includes areas which provide for commodity crop production.

SOCIAL AND ECONOMIC CONDITIONS

The existing site has provided economic enhancements to the local economy. The planned improvements will add to these economic conditions.

ENVIRONMENTAL CONSEQUENCES

PHYSICAL IMPACTS

Both the existing and proposed facility will have minimal impacts on the surrounding area and population.

Existing daily operations provide for the collection, consolidation, temporary storage, treatment and transportation of hazardous and non-hazardous waste generated by off-site industries and transport to other off-site treatment and/or final disposal facilities. Figures 2 & 3 give the existing and proposed facility layouts. Currently, only minimal amounts are released to the atmosphere during sampling procedures. However, this level is minimized by limiting the number of containers open during a sampling event.

The expanded facility will limit the amount of constituents released (both in storage and processing units) by venting through appropriate air pollution devices designed to maintain

emissions at or below regulatory levels. The Waste Stabilization Process has been granted a conditional exemption from air pollution control permit requirements by the Southeast District office of the WDNR.

An induced draft air pollution control system will be enclosed within the building which will contain the Waste Stabilization Unit. Within this building, collection points will be placed at points where potential emissions may occur. Appropriate air pollution control permits will be obtained.

Secondary containment structures around storage and treatment areas in both existing and proposed facilities are engineered to prevent accidental spills or leaks from escaping the facility. For this reason, the potential for spills or leaks entering surface or groundwater is negligible. Such an incident has not occurred during the history of the existing facility. Furthermore, there are no significant geological or topographical features on the site which would make it more vulnerable to contamination.

RESOURCE COMMITMENTS

There are no irreversible resource commitments to the existing or expanded facility. Facility equipment and structures could be utilized at other company operations. Reconversion of the site to a natural state is also possible if all structures, foundations and equipment are removed from the site.

BIOLOGICAL IMPACTS

The site is currently being utilized for Controlled Waste Division's daily operations. Primary short-term impacts from the proposed expansion project will result from construction activity on the site. Due to current site operations and the surrounding land uses, the proposed modifications will have negligible environmental impact in the long-term.

Vegetative impacts will be limited since part of the area in which the modifications are to occur has been previously utilized. Since the site contains little vegetative diversity, minimal conversion of the vegetated areas will occur.

No runoff from the hazardous waste process will occur. Any contaminated water or the generated waste is hauled off-site for proper disposal. The swale and stormwater retention system will control runoff from exiting the remaining area. This system will protect down-gradient areas from any soil deposition and flooding which my occur due to construction and daily operations. This system will also ensure no groundwater contamination will occur on or off-site.

No agricultural land or forest resources will be displaced due to project modifications.

A variety of different plant and animal habitats exist in the surrounding area. Construction operations from the expansion process will effect these areas only in the short-term. Also, any impact from the construction process will be limited to the subject site and will be minor in scope.

The wetlands areas located adjacent to the site support a variety of plant and animal life. These wetlands receive no runoff from the project area and will not receive any additional runoff from construction activities or the modified site operations. Since no impacts have occurred from existing operations, the expansion project is not expected to alter conditions.

Noise levels will only increase appreciably during the construction operations. This will only have a short-term effect on surrounding human and animal populations. When modifications are complete noise levels will fall to normal operation levels thus eliminating any long-term impacts.

Endangered and threatened species will not be displaced or effected by facility modifications.

There are no known recreational, historical or archeological areas on the site. The WDNR Bureau of Endangered Resources has communicated that no officially designated stretches of wild or scenic rivers or officially designated critical habitats would be displaced or affected by facility modifications.

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

The proposed expansion of the facility is responsive to the existing and anticipated waste treatment needs. The increased activity which will occur due to the modifications will help to maintain the viability of the Controlled Waste Division facility.

The construction activities and facility operations will enhance the industrial base within the area. The construction standards and operation procedures for hazardous waste storage are considered sufficient to protect public health. Air quality will not be altered significantly during the construction operations and will be essentially similar to existing conditions after modifications are complete.

Compliance with health and safety operations will also help to maintain public safety. Contingency and emergency plans, as well as management practices, will minimize any unplanned releases. This will further protect facility workforce and any nearby residences. The project modifications will not alter the aesthetics of the site or surrounding area.

The expansion project will improve upon the preventative procedures and safeguards for the Controlled Waste Division facility. This will require additional human resources, reporting, record keeping and monitoring. Limited environmental oversight from Controlled Waste Division may be needed. Additional local government services are not expected.

ALTERNATIVES TO THE PROJECT

The main alternative to the proposed expansion process would be to build a new facility at a different site. However, the history of Controlled Waste Division demonstrates the need for such a facility in the area. Continued operation and expansion of the existing facility is the most reasonable way of addressing current and anticipated needs with minimum environmental impact.

EFFECTS OF PROJECT

Direct environmental effects on the surrounding communities will be minimal. Indirect effects even less. Traffic will increase slightly on the area highways and access roads. No cumulative effects are anticipated to occur in the future. The overall environmental and physical impacts are not anticipated to be significant.

APPENDIX A

HAZARDOUS WASTE FACILITY

OPERATING LICENSE AND

USEPA RCRA LICENSE

CHEMICAL WASTE MANAGEMENT, INC.

CONTROLLED WASTE DIVISION

MENOMONEE FALLS, WISCONSIN

Revision 7
3/6/92

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny, Secretary
Box 7921
Madison, Wisconsin 53707
TELEFAX NO. 608-267-3579
TDD NO. 608-267-6897
SOLID WASTE TELEFAX NO. 608-267-2768

April 9, 1991

IN REPLY REFER TO: FID 268224880

Mr. Dean Thompson, General Manager
Chemical Waste Management - Controlled Waste Division
W124 N9451 Boundary Road
Menomonee Falls, Wisconsin 53051

SUBJECT: Variance For Storage and Treatment
Chemical Waste Management - Controlled Waste Division
U.S. EPA ID: WID003967148

Dear Mr. Thompson:

The Department of Natural Resources has completed its review of the variance application for the Chemical Waste Management, Inc. (CWM) - Controlled Waste Division (CWD) proposed facility located at W124 N9451 Boundary Road, Menomonee Falls, Wisconsin. The submittal was entitled, "Variance Application For A Stabilization Process" and was received by the Department on August 1, 1990 with supplemental information received on several occasions afterward. The submittal was prepared and certified by Patrick Ries, P.E., TEAM, Inc., Lemont, Illinois, and Kevin Hersey, Chemical Waste Management, Inc., Geneva, Illinois. The Department has determined that your facility as proposed will provide for satisfactory hazardous waste storage and treatment provided the conditions of the attached variance are followed.

Please note that as a condition of the variance, you are required to actively pursue a hazardous waste operating license. The attached variance requires that you submit a complete and technically adequate feasibility and plan of operation report by August 9, 1991. Therefore, you must begin notification of all affected municipalities immediately, pursuant to ss. 144.44(1m) and 144.445, Wis. Stats. This condition requires immediate notification by your company to all affected municipalities at the time of the variance issuance.

In addition, you are required to submit to the Department detailed information on the secondary reagents to be used in the stabilization process (refer to condition 31 of the variance). That information must be submitted to the Department before the stabilization facility processes any wastes.

Today the Department is publishing a public notice in The Milwaukee Sentinel which describes the variance determination and the proposed facility.

The fees for storage and treatment variances are $1250, as noted in s. NR 181.55, Wis. Adm. Code. As part of the August 1, 1990 variance request submittal, the Department received a variance fee of $600. On February 21, 1991, a $650 payment was received by the Department, fulfilling the fees required under s. NR 181.55(5)(i), Wis. Adm. Code. The variance is subject to annual variance fees under s. NR 680.45, Table XII, Wis. Adm. Code, which requires a tank storage and treatment variance fee of $4000 due October 1 each year the variance is in effect (beginning October 1, 1991).

Please review the attached conditional variance closely. The Department has considered Chemical Waste Management's comments received March 26, 1991 and April 5, 1991 on the draft variance. Your variance is subject to compliance with the conditions in the final determination and the requirements of Chapters NR 600 to 685, Wisconsin Administrative Code. (Note: Effective March 1, 1991, ch. NR 181 was replaced with chs. NR 600 to 685, Wis. Adm. Code.). Particular attention should be given to the conditions of approval. These conditions place both general and specific requirements on Chemical Waste Management - Controlled Waste Division including reporting requirements, report submittal requirements and notification requirements in addition to the licensing requirements previously mentioned. The Department reserves the right to modify the variance should conditions arise making such changes necessary.

Please call me at 608/267-7055 or Eric Syftestad at 608/267-7561 should you need assistance.

Sincerely,

Barbara J. Zellmer, Chief
Hazardous Waste Management Section
Bureau of Solid & Hazardous Waste Management

BJZ:es cwdvar3.ltr
attachments

cc: Ed Lynch - SW/3
Pete Flaherty - LC/5
Chuck Slaustas - U.S. EPA Region 5, 5 HR/13
Trish Polston - U.S. EPA Region 5, 5 HR/13
PSS/3
Kevin Hersey - Chemical Waste Management, Geneva, IL
Walt Ebersohl/Frank Schultz/Sandy Miller - SED
Dennis Antonie - Air Management SED
Dave Hantz - IWW/2
Tim Anderson - Ray-O-Vac Corporation, Madison, WI
Tim Speerschneider - DeWitt, Porter, Huggett, Schumacher, and Morgan, S.C., Madison, WI

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny, Secretary
Box 7921
Madison, Wisconsin 53707
CMM TELEFAX NO. 608-267-3579
TDD NO. 608-267-6897
SOLID WASTE TELEFAX NO. 608-267-2768

June 27, 1991

IN REPLY REFER TO: 268224880
Milwaukee County
HW License File

Ms. Susan Griggs, Facility Manager
Chemical Waste Management - Controlled Waste Division
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

SUBJECT: Chemical Waste Management - Controlled Waste Division
Construction Documentation and Inspection
U.S. EPA ID: WID 003967148

Dear Ms. Griggs:

The Department of Natural Resources has completed its review of the construction observation report for the Chemical Waste Management, Inc. (CWM) - Controlled Waste Division (CWD) stabilization facility located at W124 N9451 Boundary Road, Menomonee Falls, Wisconsin. The submittal was entitled, "Variance Construction Observation Report" and was received by the Department on June 11, 1991 with supplemental information received on June 19, 1991 and June 25, 1991. The submittal was prepared and certified by Philip J. Engelbert, Structural Department Manager, Donohue & Associates, Sheboygan, Wisconsin (Wisconsin Professional Engineer, #E-16118) and Darrel L. Schmidt, Senior Structural Engineer, Donohue & Associates, Sheboygan, Wisconsin (Wisconsin Professional Engineer, #E-18899). Chemical Waste Management - Controlled Waste Division was authorized to construct the stabilization facility pursuant to the conditional April 9, 1991 variance for storage and treatment of hazardous waste at the facility. The Department inspected the newly constructed storage and stabilization unit on June 19, 1991.

The Department has determined that this facility has been constructed in substantial compliance with the variance determination and variance application. This facility should provide for the satisfactory storage and treatment of hazardous waste provided the conditions of the variance are followed.

Chemical Waste Management - Controlled Waste Division may proceed with the operation of the facility in accordance with the conditional variance

determination issued by the Department on April 9, 1991. Please note that the variance requires you to pursue a hazardous waste license for these storage and treatment activities and that you need to submit a complete and technically adequate feasibility and plan of operation report by August 9, 1991.

If you have any concerns on this issue, please call Eric Syftestad at 608/267-7561, or myself at 608/266-3084.

Sincerely,

Edward K Lynch

Edward K. Lynch, P.E., Unit Leader
Facility Standards and Closure Unit
Hazardous Waste Management Section
Bureau of Solid & Hazardous Waste Management

EKL:es cwdvarin.ltr

cc: Barbara Zellmer - SW/3
Walt Ebersohl/Sandy Miller/Jim Morgan - SED
Pete Flaherty - LC/5
Mardi Klevs - U.S. EPA Region 5, 5 HR/13
Trish Polston - U.S. EPA Region 5, 5 HR/13
PSS/3
Dennis Antonie - Air Management SED
Dave Hantz - IWW/2
Dean Thompson - Chemical Waste Management, Alsip, IL
Tim Anderson - Ray-O-Vac Corporation, Madison, WI
Tim Speerschneider -DeWitt, Porter, Huggett, Schumacher, and Morgan, S.C., Madison, WI
Ben Johnson, Clerk, City of Milwaukee, 200 E. Wells Street, Milwaukee, WI 53202
Rod Lansar, Milwaukee County Clerk, Courthouse, Room 105 901 North 9th St., Milwaukee, WI 53233
Patricia Struve, Menomonee Falls Clerk, W156 N8480 Pilgrim Road Menomonee Falls, WI 53067
Waukesha County, Mr. George W. Guhr, Chairman, 500 Riverview Avenue Waukesha, WI 53188

STATE OF WISCONSIN
DEPT. OF NATURAL RESOURCES

HAZARDOUS WASTE FACILITY OPERATION LICENSE

AUTHORIZED CONTACT

SUSAN GRIGGS, FACILITY MANAGER
CHEMICAL WASTE MANAGEMENT-CWD
W124 N9451 BOUNDARY ROAD
MENOMONEE FALLS, WISCONSIN 53051

LICENSE NO: 03135

TYPE OF FACILITY: STORAGE

EFFECTIVE DATE: OCTOBER 1, 1991

DATE OF EXPIRATION: SEPTEMBER 30, 1992

U.S. EPA I.D. NUMBER: WID 003967148 FID 268224880

LICENSEE: CHEMICAL WASTE MANAGEMENT - CONTROLLED WASTE DIVISION

NAME OF FACILITY: CHEMICAL WASTE MANAGEMENT - CONTROLLED WASTE DIVISION

LOCATION OF FACILITY: SE 1/4 OF NE 1/4 OF SECTION 1, TOWNSHIP 08 NORTH, RANGE 20 EAST
W124 N9451 BOUNDARY ROAD
VILLAGE OF MENOMONEE FALLS, WAUKESHA COUNTY, WISCONSIN

CONTAINER STORAGE (S01):

DRUM STORAGE BUILDING
MAXIMUM CAPACITY - 44,000 GALLONS (EIGHT HUNDRED 55-GALLON DRUMS, OR AN EQUIVALENT VOLUME OF OTHER U.S. DOT APPROVED CONTAINERS)

LUGGER STORAGE AREA
MAXIMUM CAPACITY - 36,000 GALLONS IN EIGHTEEN (18) 2000 GALLON LUGGER BOXES OR EQUIVALENT VOLUME IN ROLL-OFF CONTAINERS

WASTE TYPES ARE LIMITED TO THOSE LISTED ON THE PART-A APPLICATION RECEIVED FEBRUARY 26, 1990.

THIS LICENSE IS SUBJECT TO AND CONDITIONED UPON COMPLIANCE WITH THE LICENSEE'S FEASIBILITY DETERMINATION AND PLAN OF OPERATION APPROVAL DATED SEPTEMBER 13, 1990 AND SUBSEQUENT PLAN MODIFICATIONS.

THIS LICENSE AUTHORIZES THE LICENSEE TO OPERATE THE HAZARDOUS WASTE FACILITY DESCRIBED ABOVE DURING THE TERM HEREOF EXCEPT AS MODIFIED BY THE DEPARTMENT. THIS LICENSE IS SUBJECT TO AND CONDITIONED UPON COMPLIANCE WITH CHAPTER 144, WIS. STATS., AND CHAPTERS NR 600 - 680, WIS. ADM. CODE (HAZARDOUS WASTE), ANY PLAN APPROVAL AND MODIFICATIONS THEREOF, AND ANY SPECIAL ORDER AND MODIFICATIONS THEREOF ISSUED BY THE DEPARTMENT. ANY EXEMPTIONS FROM THE REQUIREMENTS OF CHAPTERS NR 600 - 680, WIS. ADM. CODE, ISSUED FOR THIS FACILITY ARE LISTED ABOVE AND ON ATTACHED DOCUMENTS.

Carroll D. Besadny

CARROLL D. BESADNY, SECRETARY
DEPARTMENT OF NATURAL RESOURCES

Form 4430-10 Rev. 8-91

LICENSEE COPY

2-1-68-03135

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

AUG 02 1991

REPLY TO ATTENTION OF:
5HR-12

RE: Chemical Waste Management
WID 003 967 148

Dear Sir/Madam:

On AUG 2 1991, the United States Environmental Protection Agency (U.S. EPA), Region V, issued the Federal portion of a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Operating License for the above-referenced facility. When both this portion of the License and the State of Wisconsin's portion of the License are effective, Chemical Waste Management has an effective Hazardous Waste Operating License.

This letter supplements the enclosed Response to Comments generated as a result of the public notice for the draft permit. This Response to Comments was prepared by the U.S. EPA and sent to interested parties.

I have made the final decision to issue the Federal portion of the RCRA Hazardous Waste Operating License to Chemical Waste Management Incorporated for its facility in Menomonee Falls, Wisconsin. Unless review is requested under Title 40 of the Code of Federal Regulations (40 CFR) Section 124.19, the Federal portion of the RCRA permit becomes effective on SEP 3 1991, (a copy of the appeal procedures is enclosed).

This permit is effective on the date indicated on the signature page of the permit. Eligibility to appeal this permit is discussed further in 40 CFR 124.19. The original and one copy of the petition must be received by U.S. EPA in Washington, D.C. at the address indicated below within 33 days of the date of this letter.

Headquarters Hearing Clerk (A-110)
Room M3708
United States Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

A copy of the petition should also be sent to:

Allen Debus (5HR-13)
Minnesota/Wisconsin Section
Office of RCRA
U.S. EPA
230 South Dearborn Street
Chicago, Illinois 60604

The procedures for filing an appeal are found in 40 CFR 124.19. The administrative appeal procedures must be completed prior to any action seeking judicial review.

On behalf of the U.S. EPA, I wish to thank you for your interest in the draft permit conditions for Chemical Waste Management.

Sincerely yours,

Jodi Traub

for David A. Ullrich, Director
Waste Management Division

Enclosure

RESPONSE TO COMMENTS
REGARDING THE
RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
HAZARDOUS WASTE MANAGEMENT FACILITY
PERMIT TO BE ISSUED TO
CHEMICAL WASTE MANAGEMENT - CONTROLLED
WASTE DIVISION
MENOMONEE FALLS, WISCONSIN
WID 003 967 148

INTRODUCTION

This response is issued pursuant to Title 40 of the Code of Federal Regulations (40 CFR) Section 124.17, which requires that any changes of draft permit conditions be specified along with the reason for the change; that all significant comments be described and responded to; and that any documents cited in the response be included in the administrative record. Comments were requested regarding the United States Environmental Protection Agency's (U.S. EPA) tentative determination to modify sections of a RCRA permit previously issued to the Permittee on June 1, 1988.

The 45-day public comment period commenced on April 6, 1991, with public notices in the Milwaukee Sentinel and the Waukesha County Freeman, as well as a radio announcement on a local radio station, WEMP. The termination date of this comment period was May 20, 1991. A written comment, dated May 17, 1991, was received concerning condition IV.F. of the draft permit modification, which shall be addressed below.

Additionally, pertinent information and materials were available at the Village of Menomonee Falls Public Library, located at W156 N8446 Pilgrim Road, Menomonee Falls, Wisconsin, and at the Milwaukee Central Library, located at 814 West Wisconsin Avenue, Milwaukee, Wisconsin. A request for a public hearing was not received.

COMMENTS AND RESPONSE

The Permittee's comment letter, dated May 17, 1991, was received by the U.S. EPA on May 20, 1991. Two comments were made in this letter. The Permittee questioned whether the State of Wisconsin had authority to regulate storage of hazardous wastes promulgated under the Hazardous and Solid Waste Amendments of 1984 (HSWA). By agreement between the Wisconsin Department of Natural Resources (WDNR) and the U.S. EPA, this comment was addressed by WDNR in a transmittal letter dated June 6, 1991. The Permittee's other comment is addressed below.

COMMENT

The Permittee questioned whether authority for construction and operation of a proposed Waste Stabilization Process area, for which a variance was received from the State of Wisconsin on April 9, 1991, would be permitted under Condition IV.F. of the Federal permit.

RESPONSE

The proposed Waste Treatment Process area cannot be regarded as an existing, though previously unregulated, unit which becomes subject to the new toxicity characteristic regulations. (Federal Register, vol. 55, no. 61, March 29, 1990). Therefore, the proposed Waste Treatment Process area can only be authorized for use according to terms stated in the State of Wisconsin's April 9, 1991, variance if this area's units are managed in accordance with interim status standards contained in 40 CFR Part 265. Since the variance provides equivalency to interim status, the Permittee effectively has authorization to "... operate equally and simultaneously with the regulatory requirements of the State of Wisconsin."

DETERMINATION

There are no changes to the modification as proposed (the draft permit).

Based on a full review of all relevant data provided to the U.S. EPA, the U.S. EPA has determined that the final permit contains such terms and conditions necessary to protect human health and the environment. In addition, based on its review of the application materials, written comments and pertinent regulations, the U.S. EPA has determined that revision and/or clarification of the permit is not necessary.

II. LAND DISPOSAL RESTRICTIONS

A. GENERAL CONDITIONS

1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by statute (Section 3004 of RCRA).

2. A mixture of any restricted waste with nonrestricted waste(s) is a restricted waste under 40 CFR Part 268.

3. The Permittee shall not in any way dilute a restricted waste or the residual from treatment of a restricted waste as a substitute for adequate treatment to achieve compliance with 40 CFR Part 268, Subpart D, to circumvent the effective date of a prohibition in 40 CFR Part 268, Subpart C, to otherwise avoid a prohibition in 40 CFR Part 268, Subpart C, or to circumvent a land disposal prohibition imposed by Section 3004 of RCRA.

4. The Permittee shall prepare and maintain a current list of the hazardous waste codes handled by the facility that are identified in 40 CFR 268, Subparts B and C. The list shall include all waste codes handled by the facility, and any associated treatment standards, and shall be updated through the inclusion of new treatment standards, as promulgated or amended. This list shall be provided to the U.S. EPA representatives, or their designees, upon request.

B. TESTING AND RELATED REQUIREMENTS

1. The Permittee must test, in accordance with 40 CFR 268.7(a), any waste generated at the facility, or use knowledge of the waste, to determine if the waste is restricted from land disposal.

2. For restricted wastes with treatment standards expressed as concentrations in the waste extract, as specified in 40 CFR 268.41, the Permittee shall test the treatment residues, or an extract of such residues developed using the test methods described in Appendix I of 40 CFR Part 268 (Toxicity Characteristic Leaching Procedure, or TCLP) to assure that the treatment residues or extract meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.

3. For restricted wastes under 40 CFR 268.32 or Section 3004(d) of RCRA, which are not subject to any treatment standards under 40 CFR Part 268, Subpart D, the Permittee shall test the treatment residues according to the generator requirements specified under 40 CFR 268.32 to assure that the treatment residues comply with the applicable prohibitions of 40 CFR Part 268, Subpart C. Such testing shall be performed as required by 40 CFR 264.13.

4. A restricted waste for which a treatment technology is specified under 40 CFR 268.42(a) may be land disposed after it is treated using that specified technology or an equivalent treatment method approved by the Administrator under the procedures set forth in 40 CFR 268.42(b).

5. For restricted wastes with treatment standards expressed as concentrations in the waste, as specified in 40 CFR 268.43, the Permittee shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards of 40 CFR Part 268, Subpart D. Such testing shall be performed as required by 40 CFR 264.13.

6. The Permittee shall comply with all the applicable notification, certification, and recordkeeping requirements described in 40 CFR 268.7(a) and (b).

C. STORAGE PROHIBITIONS

1. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR Part 268, Subpart E.

2. Except as otherwise provided in 40 CFR 268.50, the Permittee may store restricted wastes in tanks and containers solely for the purpose of the accumulation of such quantities of hazardous wastes as necessary to facilitate proper recovery, treatment, or disposal provided that:

   a. Each container is clearly marked to identify its contents and the date each period of accumulation begins; and

   b. Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received, and the date each period of accumulation begins, or such information for each tank is recorded and maintained in the operating record at that facility.

3. The Permittee may store restricted wastes for up to 1 year unless the U.S. EPA or its authorized agent can demonstrate that such storage was not solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

4. The Permittee may store restricted wastes beyond 1 year; however, the Permittee bears the burden of proving that such storage was solely for the purpose of accumulating such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

5. The Permittee shall not store any liquid hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 ppm unless the waste is stored in a storage facility that meets the requirements of 40 CFR 761.65(b). This waste must be removed from

storage and treated or disposed as required by 40 CFR Part 268 within 1 year of the date when such wastes are first put into storage. Condition II.C.4. above, that allows storage for over 1 year with specified demonstration, does not apply to PCB wastes prohibited under 40 CFR 268.32.

6. In addition to hazardous waste codes indicated in specific Condition 6, covering "Limitation On Waste", of the State of Wisconsin's Feasibility Report and Plan of Operation, dated September 13, 1990, and Conditions IV.D. and V. of this permit, the Permittee can also store the following hazardous waste codes in containers subject to terms of this permit, and applicable container management practices required by the State of Wisconsin's portion of the RCRA License:

   F039

III. PLANS FOR CORRECTIVE ACTION

There are no known releases requiring corrective action from solid waste management units at the site. If any information becomes available concerning releases from solid waste management units, (whether that information becomes available pursuant to the Permittee's duty to provide information under Condition I.D.7. of this permit, or through other sources), the Regional Administrator will commence actions to modify this permit in order that appropriate corrective action will be implemented.

IV. TOXICITY CHARACTERISTIC

A. The Permittee must use the Toxicity Characteristic Leaching Procedure (TCLP) (Appendix II of 40 CFR Part 261), or use knowledge of the waste to determine whether a waste exhibits the characteristic of toxicity, as defined in 40 CFR 261.24. Use of the TCLP does not exempt the Permittee from also using the Extraction Procedure (EP) toxicity test if required by the State permit conditions.

B. As required by 40 CFR 270.42(g)(1)(v), if the Permittee is managing newly regulated waste in a previously unregulated land disposal unit, the Permittee must certify to the Regional Administrator by September 25, 1991, that such unit is in compliance with all applicable 40 CFR Part 265, Subparts F and H ground-water monitoring and financial responsibility requirements. Failure to certify will result in the loss of interim status for such unit.

C. Within 30 days after the effective date of this permit, the Permittee must submit to the Regional Administrator a revised Waste Analysis Plan pursuant to 40 CFR 264.13 which identifies the TCLP as the test method for the characteristic of toxicity.

D. In addition to hazardous waste codes indicated in specific Condition 6, covering "Limitation On Waste", of the State of Wisconsin's Feasibility Report and Plan of Operation, dated September 13, 1990, and

Conditions II.C.6. and V. of this permit, the Permittee can also store the following hazardous waste codes in containers subject to terms of this permit, and applicable container management practices required by the State of Wisconsin's portion of the RCRA License:

D018 through D043

E. If the Permittee is managing newly regulated wastes (based on the TCLP) in units permitted in the State portion of this permit, the Permittee shall operate those units in accordance with the State license conditions.

F. This permit does not cover the management of newly regulated hazardous waste in previously unregulated units. If the Permittee is managing newly regulated waste (based on the TCLP) in previously unregulated units, those units must be managed in accordance with the interim status standards contained in 40 CFR Part 265.

V. STORAGE OF OTHER HAZARDOUS WASTE

In addition to hazardous waste codes indicated in specific Condition 6, covering "Limitation On Waste", of the State of Wisconsin's Feasibility Report and Plan of Operation, and Conditions II.C.6. and V. of this permit, the Permittee can also store the following hazardous waste codes in containers subject to terms of this permit, and applicable container management practices required by the State of Wisconsin's portion of the RCRA License. Prior to storage or treatment of these additional waste codes, the Permittee shall receive approval from the State of Wisconsin to manage these wastes:

F037
F038
K107
K108
K109
K110
K131
K132

MILWAUKEE AND WAUKESHA COUNTIES
CHEMICAL WASTE MANAGEMENT
CONTROLLED WASTE DIVISION

ROUTINE ON-SITE WETLAND INVESTIGATION
NR 103 WATER QUALITY STANDARDS FOR WETLANDS

PREPARED BY
SEC Donohue

MAY, 1992

PROJECT NUMBER: M1977.1

TABLE OF CONTENTS

INTRODUCTION

The Controlled Waste Division facility proposes to expand their existing hazardous waste storage and handling facilities in Menomonee Falls, Wisconsin. This facility is to collect, consolidate, temporarily store and treat hazardous and non-hazardous waste generated off-site and transport it to other off-site treatment and/or final disposal facilities. The purpose of this report is to respond to Chapter NR103, Wis. Adm. Code which concerns water quality standards for wetlands.

Since two potential wetland areas are located proximate to the proposed expansion, this report specifically responds to a demonstration of impacts upon these resources. The purpose of the expansion was to incorporate the Waste Stabilization Process and associated ancillary activities, including RCRA Storage Unit, into the facility Hazardous Waste License No. 03135.

Overall current requirements for hazardous waste treatment/disposal currently exceeds in-state capacity. In the future, competition for remaining hazardous waste disposal capacity is expected to increase. The additional treatment and storage capacity of Controlled Waste Division will be responsive to this need. The overall impact on proximate wetlands from previous operations and the proposed modifications from this application are evaluated.

SITE LOCATION

The regional and local site location is shown in Figure 1. Controlled Waste Division is located in southeastern Wisconsin, in the metropolitan Milwaukee area, within the Village of Menomonee Falls. The facility is approximately 15 miles northwest of the center of Milwaukee. The Controlled Waste Division facility, which is approximately 7.53 acres in size, is located in the southeast 1/4 of the northeast 1/4 of Section 1, T.8.N., R.20.E., Village of Menomonee Falls, Waukesha County, Wisconsin. The site is accessible from the Milwaukee area by U.S. Highway 41 and State Highway 145.

INVESTIGATION PROCEDURES

Wetland field investigations were conducted on April 11, 1991, and May 5, 1992, to identify wetlands and evaluate potential impacts on wetland areas adjoining the Controlled Waste Division facility. Figures #2 is the United States Department of Agriculture (U.S.D.A.) Wetland Aerial Photographs indicating the presence of potential wetland areas within two adjacent areas (delineated and cross-hatched). No wetlands were identified on the Controlled Waste Division property.

The adjacent potential wetland areas (Sites #1 and #2) which met the COE mandatory criteria were then evaluated utilizing the three mandatory technical criteria outlined in the Federal Manual for Identification and Delineation of Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation, 1989). The Routine On-site Determination Method was used with all three wetland criteria being evaluated separately within each subject site. Field indicators for the three wetland parameters (i.e., vegetation, soils and hydrology) were also evaluated. Wetland-upland boundaries were delineated by documenting each plant community, hydric and non-hydric soils, and hydrological factors on a base map and then correlating this base map with soil and topographical mapping. The wetland areas to be potentially impacted were delineated using U.S.D.A. Wetland Aerial Photography, topographical mapping, soil mapping, and on-site investigation. Figures #3a and 3b exhibit wetland areas within Sites #1 and #2.

WETLAND CHARACTERISTICS

Based upon the field investigations, it was determined that two subject sites contained the three mandatory wetland criteria. However, not all portions of each subject site exhibited the mandatory criteria.

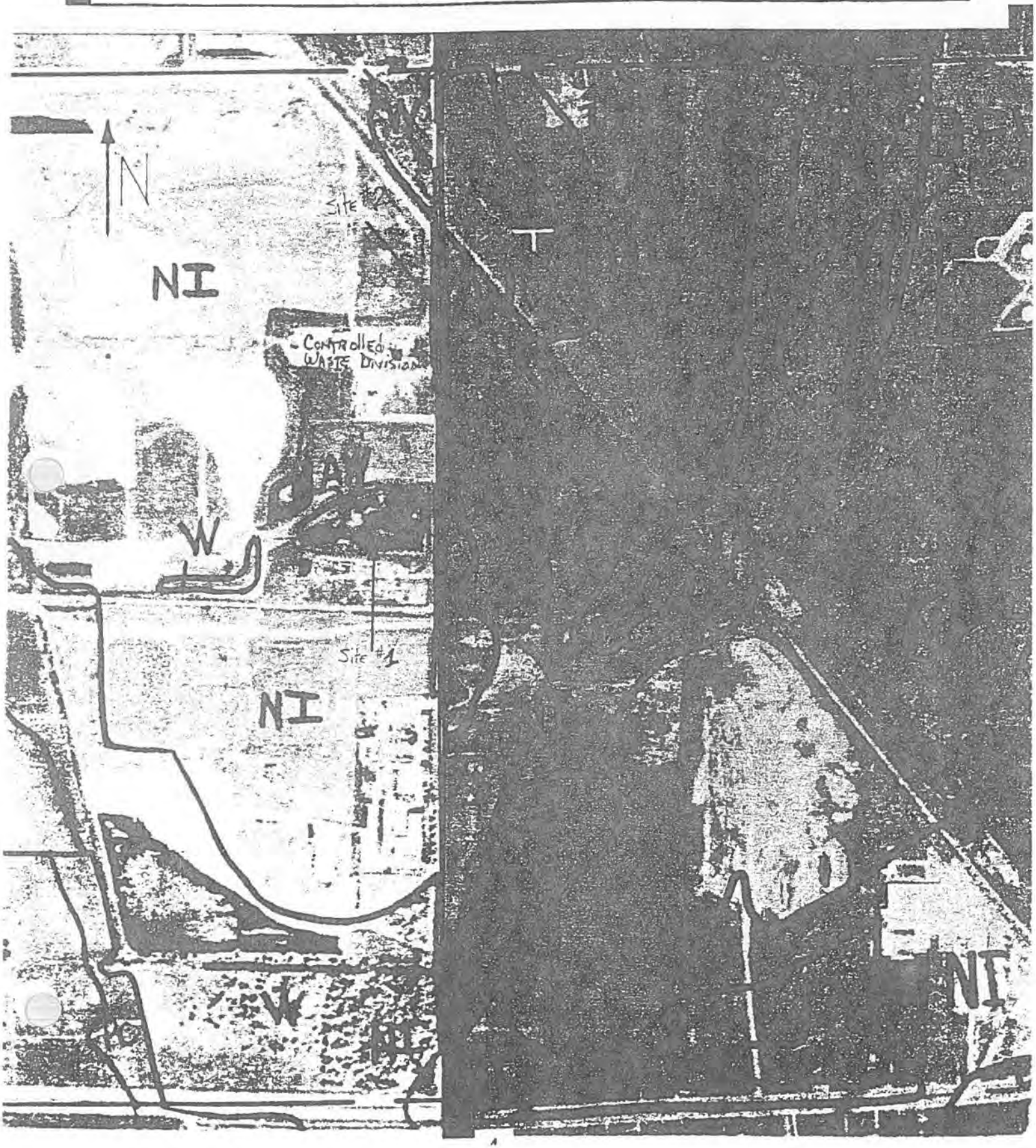
FIGURE 2

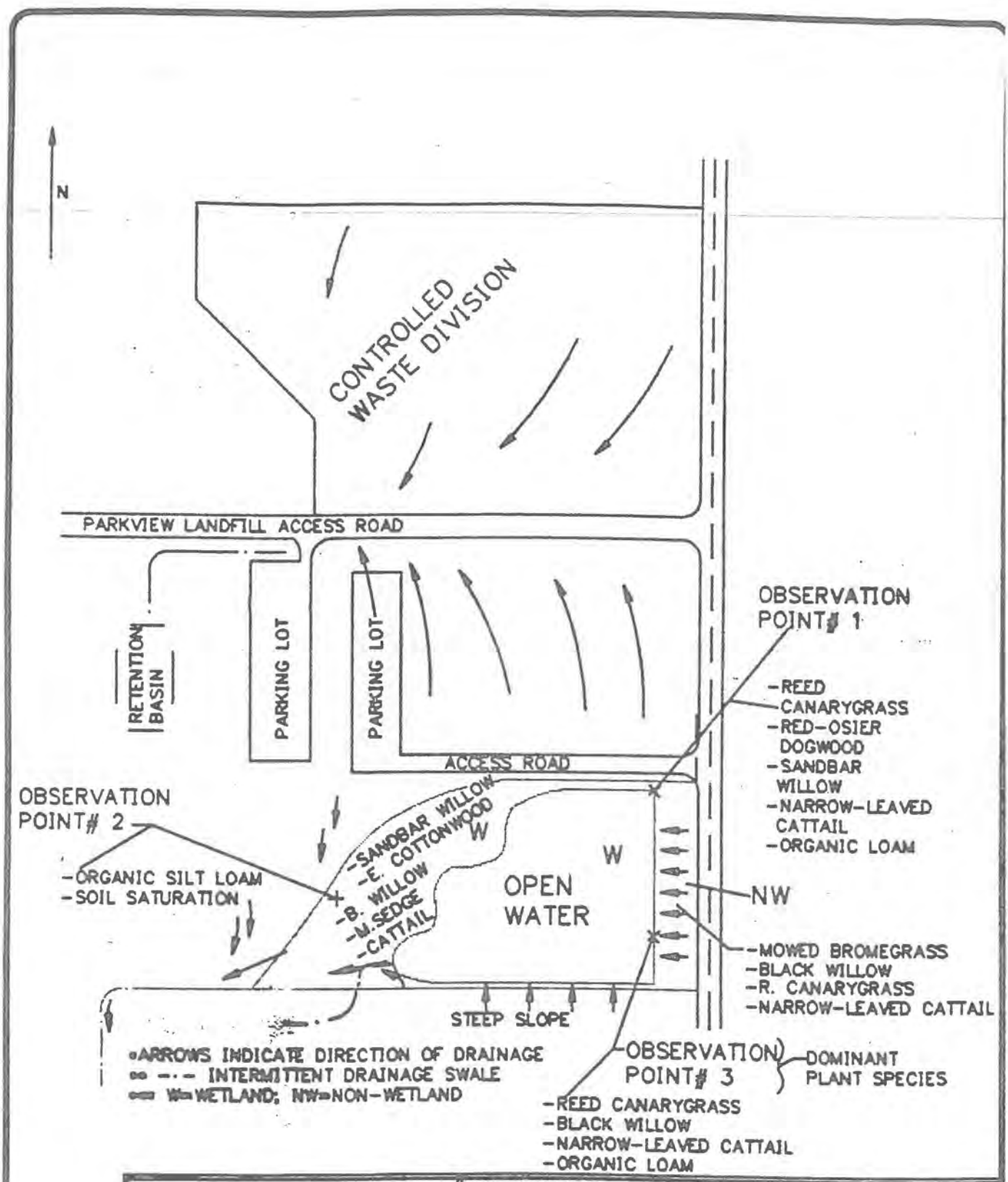
U.S.D.A. Wetland Aerial Photograph

CHEMICAL WASTE MANAGEMENT - CONTROLLED WASTE DIVISION FACILITY

MENOMONEE FALLS, WI

SEC DONOHUE
Environment & Infrastructure





SEC DONOHUE

0 8'

DRAWING TITLE Wetland - Non-Wetland Boundaries

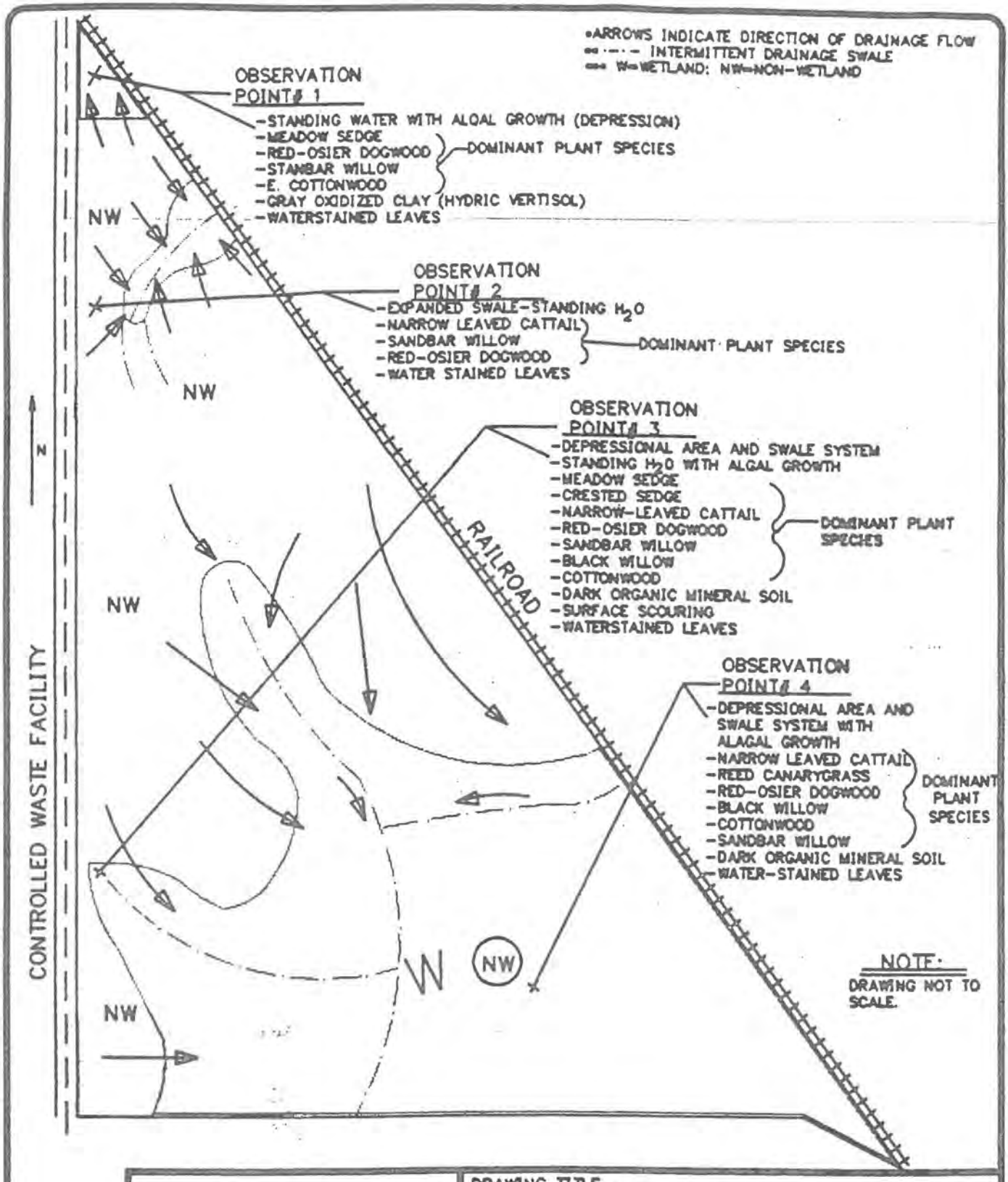
Observation Point Location

SITE#1

DATE 05/22/92 JOB NO. M1977

CAD FILE NO. FIG1

FIGURE 3a



SEC DONOHUE

0 8'

DRAWING TITLE

Wetland - Non-Wetland Boundaries

Observation Point Location

SITE#2

DATE 05/22/92 JOB NO. M1977

CAD FILE NO. FIG2

FIGURE 3b

Site #1) Contains hydric soils, hydrophytic vegetation and wetland hydrology throughout the site. These criteria are confined to the undisturbed portion of the site itself and are not evident on either the Controlled Waste Division facility to the north or the property to the south. This site contained open water within the abandoned gravel pit itself and hydrophytic vegetation surrounding the open water and throughout the swale located on the western site boundary. This swale also contains standing water. Site #1 exhibits the mandatory wetland criteria throughout its entire area (omitting roadside area).

Both wildlife and hydrological functions were present within this wetland area. The open water area acts as a source of water retention in which water evaporates, is subject to vegetative transpiration, seeps into groundwater, or is gradually released into the overflow swale. All of these hydrologic functions reduce the flooding potential of down-gradient areas. The site is utilized as a water source for wildlife. Forage and habitat is available for mammals, birds, amphibians, fish, and insects. Dense hydrophytic vegetation protects the site and surrounding areas from soil transportation.

Site #2) This site exhibited standing water on its northern tip, throughout the on-site swale system, and on the approximate southern 1/3 of the site. Some areas of this site were non-wetland areas and contained such open field specifies as Smooth Broomegrass, Tall Goldenrod, and Wild Strawberry. The wetland areas of this site provide both hydrologic and wildlife functional values. Also, these functional values can be tied into site #1's wetland functional values due to their close proximity.

This site acts as a runoff storage area which allows water to evaporate, be transpired, seep into groundwater supplies, or be slowly discharged to the south through the site's present swale system. These hydrological functions protect down-gradient areas from flooding. The dense hydrophytic vegetation protects the site and surrounding area from soil transportation. The presence of three vegetative strata provides habitat and forage for a variety of wildlife including deer, small mammals, birds, amphibians, and insects.

No wetland areas were identified on the Controlled Waste Division facility. All runoff from this site is collected in a stormwater retention basin southeast of the site. No runoff from this site enters the adjacent wetland areas. The artificial retention basin protects down-gradient areas from any soil transportations. In case of severe storm events, another artificial retention basin (incorrectly designated as "W" on the U.S.D.A. Wetland Aerial Photography) collects excess runoff to further protect down-gradient areas.

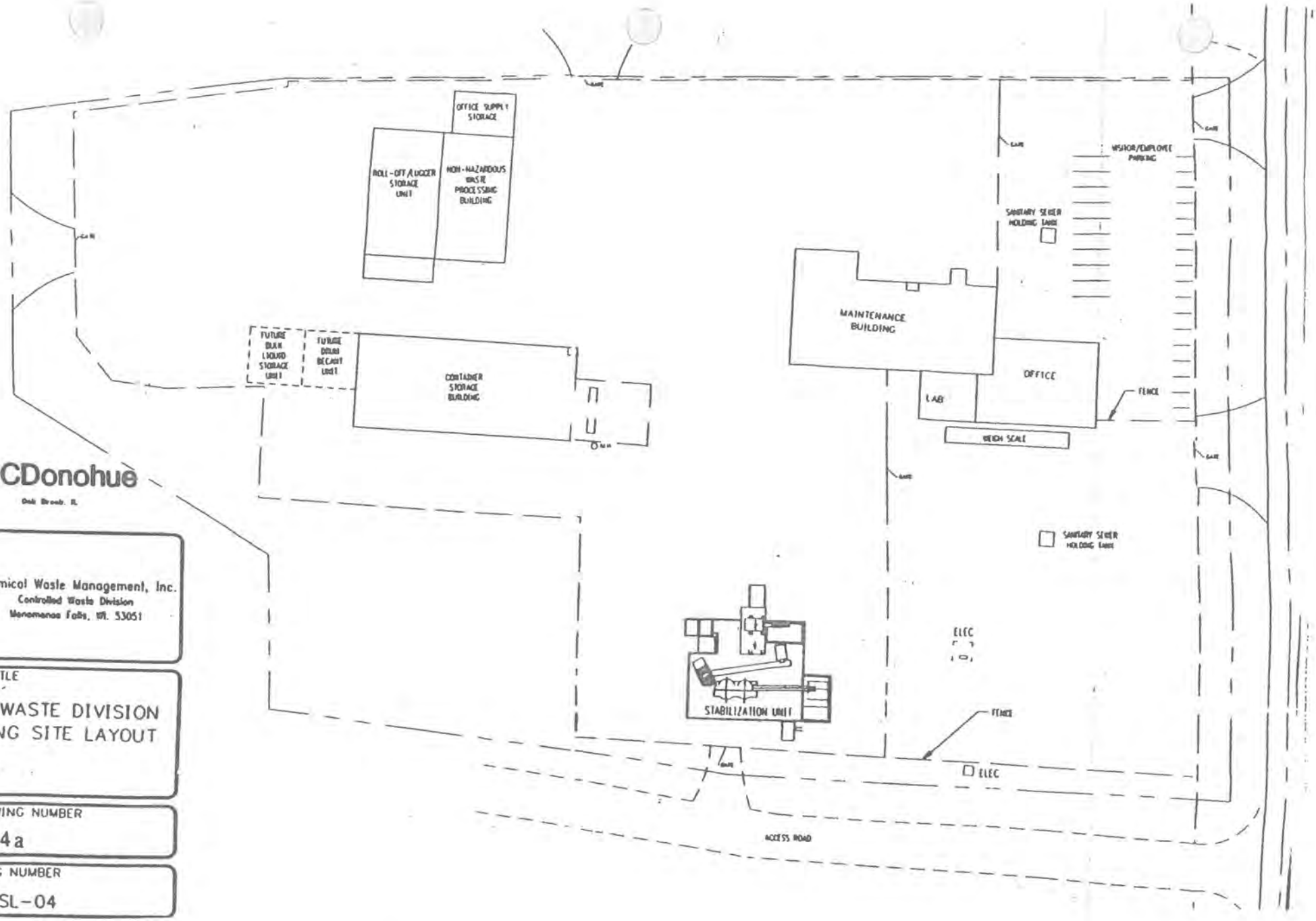
The Endangered Resources Bureau and State Historical Society were contacted to determine the possible presence of endangered plants and animals or items of archaeological significance. The data bases reviewed do not indicate known endangered species or archaeological sites within and proximate to the project area.

EVALUATION OF WETLAND IMPACTS

The Controlled Waste Division facility site is not directly tributary to or hydrologically connected to either wetland site #1 or #2. The facility has no wastewater or process water discharges. Analysis of Figures 3a and 3b clearly demonstrate that the stormwater runoff during normal rainfall periods and severe storm events from this facility will not impact either potential wetland.

The existing operations of the Controlled Waste Division facility has not demonstrated any ecologic or hydrologic impact upon either wetland site. The proposed expansion will be within the current facility boundary. The expanded facility is not anticipated to have any impact upon either site. The proposed expansion will not alter the hydrologic regime of the wetlands or result in dredging or filling of the wetlands. An environmental evaluation of the proposed expansion does not envision any short or long term environmental impacts upon these potential wetland sites.

Facility Expansion will remain within current site boundaries (Figures #4a and 4b). The water quality standards for wetlands, pursuant to NR103 Wis. Adm. Code, will not be impacted during or after facility expansion. The educational, scientific, recreational, cultural, and aesthetic values of the adjacent wetland areas will remain constant. No liquids, fills, solids, or gases will be introduced into these areas during or after facility expansion, which would cause adverse impacts. The viability of these natural areas will remain constant.



SECDonohue

Oak Brook, IL

10

Chemical Waste Management, Inc.
Controlled Waste Division
Menomonee Falls, WI. 53051

WING TITLE

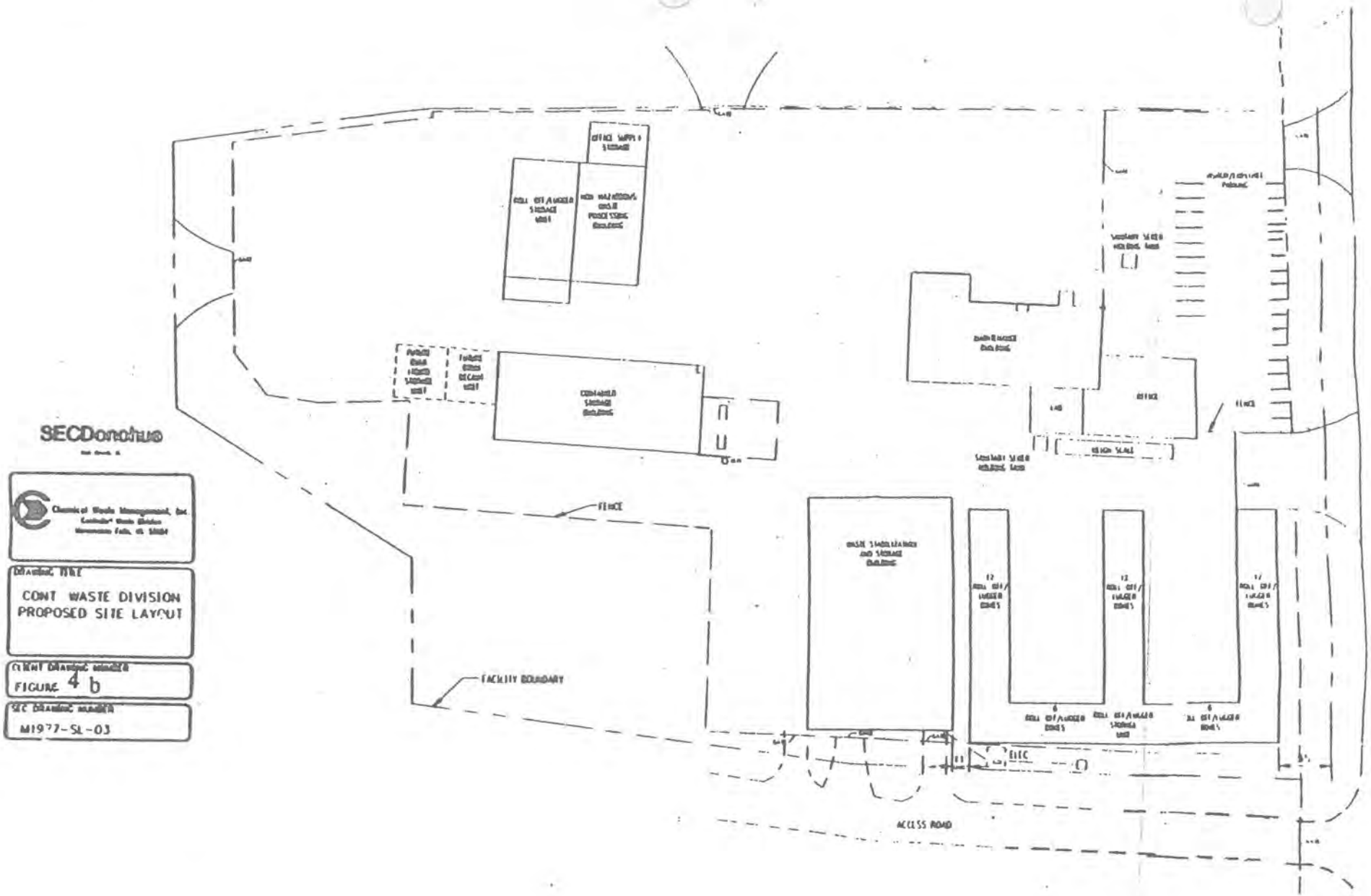
ONT. WASTE DIVISION
XISTING SITE LAYOUT

NT DRAWING NUMBER

URE 4a

DRAWING NUMBER

1977-SL-04


SECDonohue
Chemical Waste Management, Inc.
Container Waste Division
DRAWING TITLE
CONT WASTE DIVISION
PROPOSED SITE LAYOUT
CLIENT DRAWING NUMBER
FIGURE 4 b
SEC DRAWING NUMBER
M1977-SL-03
FENCE
FACILITY BOUNDARY
ACCESS ROAD

REFERENCES

Cowardin, L.M. V. Crater, F.C. Golet, and E.T. LaRoe, 1979. Classification of Wetlands and Deep Water Habitats of the United States. U.S. Fish and Wildlife Service, Washington D.C. Publ. No. FWS/OBS-79/31.

Federal Emergency Management Agency, 1981. Flood Insurance Rate Map. Federal Insurance Administration.

Federal Interagency Committee for Wetland Delineation, 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service Washington, D.C. Cooperative technical publication. 76 pp. plus appendices.

Finley, Robert W., 1976. Geography of Wisconsin. The Regents of the University of Wisconsin System. Madison, Wisconsin. 558 pp.

Reed, Porter B., 1988. National List of Plant Species That Occur in Wetlands: North Central (Region 3). Fish and Wildlife Service, U.S. Department of the Interior.

United States Department of Agriculture, 1990. Hydric Soils List of Milwaukee and Waukesha Counties.

United States Department of Agriculture, 1971. Soil Survey of Milwaukee and Waukesha Counties, Wisconsin.

United States Geological Survey, 1976. Menomonee Falls, Wisconsin, 7.5 minute Topographic Quadrangle.

University of Illinois - College of Agriculture, 1981. Weeds of the North Central States.

SEC DONOHUE

April 14, 1992

Ms. Kelly Carns
DNR Bureau of Endangered Resources
P.O. Box 7921
Madison, WI 53707

Dear Ms. Carns:

I am working on behalf of Chemical Waste Management - Controlled Waste Division (CWM-CWD) on a Feasibility and Plan of Operation Report which has been submitted to the Department of Natural Resources (DNR). CWM-CWD is located at W124 N9451 Boundary Road, Menomonee Falls, in Waukesha County, Wisconsin. The legal description for the site is:

> That part of the N.E. 1/2 of Section 1 T. 8 N., R. 20 E. in the Village of Menomonee Falls, Waukesha County, Wisconsin, bounded and described as follows: Commencing at the N.E. corner of said Section 1, thence S. 00° 37' 14" E. along the East line of N.E. 1/2 of Section 1 a distance of 1374.60' to the place of beginning; thence S. 89° 49' 10" W. 640.86"; thence S. 82° 45', 42" W. 77.46; thence 00° 37'14" E. 180.00'; thence S. 57° 14' 09" E. 190.84; thence S. 100.00'; thence S. 82° 24' 19" E. 302.65"; thence S. 88° 24' 17" E. 359.57' to the East line of the N.E. 1/2 of Section 1; thence N. 00° 37' 14" W. along the East line of the N.E. 1/2 of Section 1, a distance of 457.69' to the place of beginning. Reserving the East'ly 33' for road purposes. Above description contains a total of 7.53 A.C.'s more or less.

As part of our submittal, the DNR has requested that we verify certain information. In 1989 a representative at CWM-CWD contacted you requesting information regarding the existence of wild and scenic rivers or officially designated critical habitats in the area of the site. It was documented that you indicated that there are no officially designated wild or scenic rivers or critical habitats close to the site.

The state has requested that we provide a written response from you. Could you please verify the above information and provide it to me in writing. We are required to provide a response to the state by April 30th, so your immediate attention will be appreciated. If you are no longer responsible for these types of inquiries, I would appreciate it if you would direct this request to the appropriate individual.

If you have any questions, I can be reached at 708/829-3777. For your convenience, I have included a map which shows the location of the site.

Sincerely,

Holly Szpara

Holly Szpara
Project Scientist

enclosure
cc: R. Clarke
D. Majerczak, CWM - Midwest Region
K. McGrath, CWM - Menomonee Falls

Reference: April 14, 1992 letter to DNR Bureau of Endangered Resources. (Szpara to Carns)

No response has been received. Copies of the response letter will be forwarded to the appropriate individuals when it is received.

SEC DONOHUE

April 14, 1992

Ms. Charmaine Harbort
Archives Division
State Historical Society of Wisconsin
816 State Street
Madison, WI 53706

Dear Ms. Harbort:

I am working on behalf of Chemical Waste Management - Controlled Waste Division (CWM-CWD) on a Feasibility and Plan of Operation Report which has been submitted to the Department of Natural Resources, (DNR). CWM-CWD is located at W124 N9451 Boundary Road, Menomonee Falls, in Waukesha County, Wisconsin. The legal description for the site is:

> That part of the N.E. 1/2 of Section 1 T. 8 N., R. 20 E. in the Village of Menomonee Falls, Waukesha County, Wisconsin, bounded and described as follows: Commencing at the N.E. corner of said Section 1, thence S. 00° 37' 14" E. along the East line of N.E. 1/2 of Section 1 a distance of 1374.60' to the place of beginning; thence S. 89° 49' 10" W. 640.86"; thence S. 82° 45', 42" W. 77.46; thence 00° 37' 14" E. 180.00'; thence S. 57° 14' 09" E. 190.84; thence S. 100.00'; thence S. 82° 24' 19" E. 302.65"; thence S. 88° 24' 17" E. 359.57' to the East line of the N.E. 1/2 of Section 1; thence N. 00° 37' 14" W. along the East line of the N.E. 1/2 of Section 1, a distance of 457.69' to the place of beginning. Reserving the East'ly 33' for road purposes. Above description contains a total of 7.53 A.C.'s more or less.

As part of our submittal, the DNR has requested that we verify certain information. In 1989, a representative of CWM-CWD contacted you requesting information regarding registered historical sites in Menomonee Falls. It was documented that you indicated that there were only two registered historical sites in Menomonee Falls: the Mace Kiln and the Miller-Davidson Train Station/Museum Property which are located 5 miles and 1 mile, respectively, from the Controlled Waste Division site.

The state has requested that we provide a written response from you. Could you please verify the above information and provide it to me in writing. We are required to provide a response to the state by April 30th, so your immediate attention will be appreciated. If you are no longer responsible for these types of inquiries, I would appreciate it if you would direct this request to the appropriate individual.

If you have any questions, I can be reached at 708/829-3777. For your convenience, I have included a map which shows the location of the site.

Sincerely,

Holly Szpara

Holly Szpara
Project Scientist

enclosure
cc: R. Clarke
D. Majerczak, CWM - Midwest Region
K. McGrath, CWM - Menomonee Falls

State Historical Society of Wisconsin
Division of Historic Preservation
816 State Street • Madison, Wisconsin 53706-1488
☎ (608) 264-6500 • FAX (608) 264-6404

May 14, 1992

Ms. Holly Szpara
SEC Donohue
3001 Butterfield Road
Oakbrook, IL 60521

IN REPLY PLEASE REFER TO:
SHSW: 92-0428/WK

RE: Chemical Waste Management Proposed Disposal Site

Dear Ms. Szpara:

We have reviewed the above referenced project as required by s.44.40, Wis. Stats. No properties would be affected by this project that are listed in: The State or National Registers of Historic Places, in the Wisconsin Inventory of Historic Places, or on the list of locally designated historic places.

No further actions are necessary to document compliance with Wisconsin's historic preservation laws. If there are any questions concerning this matter, please contact Gretchen Block of my staff at (608) 264-6505.

Sincerely,

Richard W. Dexter
Chief, Compliance Section
DIVISION OF HISTORIC PRESERVATION

RWD/GB/gb

cc: Stan Druckenmiller, DNR

Chemical Waste Management, Inc.

Controlled Waste Division
W124 N9451 Boundary Road
Menomonee Falls, Wisconsin 53051
414/255-6655

April 9, 1992 Airborne Express # 232150100

Department of Natural Resources
Bureau of Endangered Resources
ATTN: Acting Bureau Director
P.O. Box 7921
Madison, WI 53707

Dear Director:

Please find enclosed a legal description and topographic map for our facility. The WDNR is in the process of reviewing and updating the Feasibility Report and Plan of Operation (FRPO) for this site. They have requested that we provide written documentation of compliance with (S. NR 630.18) and CH NR27) of the Wisconsin Administration Code, and have referenced your office in their request. It should be noted that no physical expansion or boundary changes are occurring with the revised FRPO.

Your expeditious review of the property would be greatly appreciated as we must submit your report to the WDNR before April 30, 1992.

If this time frame cannot be accommodated, please call myself or Kevin McGrath at (414)255-6655.

Very Truly Yours,

Susan Griggs

Susan Griggs
Facility Manager

Reference: April 9, 1992 letter to DNR Bureau of Endangered Resources. (Griggs to Director)

No response has been received. Copies of the response letter will be forwarded to the appropriate individuals when it is received.

A p p e n d i x G

Certification of Pollution Liability Insurance

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
FAX 608-267-3579
TTY Access via relay - 711

October 10, 2012

FID #268224880

Mr. Paul McShane, General Manager
Veolia ES Technical Solutions, LLC
W124 N 9451 Boundary Road
Menomonee Falls, WI 53051

Subject: Receipt of Hazardous Waste Facility Certificate of Liability Insurance
Veolia ES Technical Solutions Hazardous Waste Facility, Menomonee Falls
EPA ID# WID 003967148

Dear Mr. McShane:

The Department acknowledges receipt of the Hazardous Waste Facility Certificate of Liability Insurance for Veolia ES Technical Solutions Hazardous Waste Facility, Menomonee Falls, EPA ID #WID003967148. The certificate of liability insurance with an effective date of September 30, 2012 was submitted to demonstrate compliance with ch. NR 664.0147, Wis. Adm. Code, as proof of financial responsibility for the above listed facility.

Should you have any questions regarding this matter, please contact Dennis Gawronski at (608) 266-1486 (E-mail: Dennis.Gawronski@wisconsin.gov).

Sincerely,

Colleen Storck

Colleen Storck, Chief
Business Support & IT Section
Bureau of Waste and Materials Management

Cc: Dennis Gawronski – WA/5
Dolores Hayden – SER
Mike Ellenbecker – Sturtevant Service Center

VEOLIA
ENVIRONMENTAL SERVICES
TECHNICAL SOLUTIONS
NORTH AMERICA

GREEN TIER

September 27, 2012

Ms. Colleen Storck
Section Chief, Business Support and IT
Wisconsin Department of Natural Resources
Division of Air and Waste
Waste and Materials Management
101 S. Webster Street WA/3
P.O. Box 7921
Madison, WI 53707-7921

Re: Sudden Accidental Liability Coverage for Veolia ES Technical Solutions, L.L.C.
File No. FID268224880
EPA ID No. WID003967148

Dear Ms. Storck:

Attached is a copy of the Certificate of Liability Insurance for Veolia ES Technical Solutions, L.L.C.

If you have any questions or comments regarding this issue please contact Tom Daly, of my staff, at (262) 255-6655.

I certify under penalty of law that this document and all attachments were prepare under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

John Flaminio
General Manager

Cc: Mike Ellenbecker (WDNR)

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road, Menomonee Falls, WI 53051
tel: 262-255-6655 - fax: 262-255-6655
www.VeoliaES.com

HAZARDOUS WASTE FACILITY CERTIFICATE OF LIABILITY INSURANCE

1. LEXINGTON INSURANCE COMPANY, (the "Insurer"), of 100 Summer St., Boston, MA, 02110, hereby certifies that it has issued liability insurance covering bodily injury and property damage to Veolia Environmental Services North America Corp., (the "insured"), of 200 E Randolph Drive, Chicago, IL, 60601, in connection with the insured's obligation to demonstrate financial responsibility under s. NR 664.0147 or 665.0147, Wis. Adm. Code. The coverage applies at:

NAME OF FACILITY	ADDRESS OF LOCATION	EPA IDENTIFICATION NUMBER
Veolia ES Technical Solutions, LLC	1275 Mineral Springs Dr. Port Washington, WI 53074	WID988566543
Veolia ES Technical Solutions, LLC	W124 N9451 Boundary Road Menomonee Falls, WI 53051	WID003967148

for sudden and non sudden accidental occurrences.. The limits of liability are $4,000,000 each occurrence and $8,000,000 annual aggregate, exclusive of legal defense costs. The coverage is provided under policy number PLS 2032087, issued on September 30, 2012. The effective date of the policy is September 30, 2012.

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

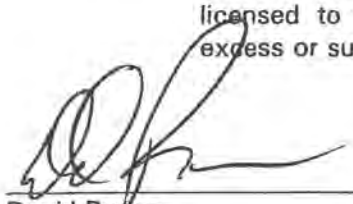
   (a) Bankruptcy or insolvency of the insured may not relieve the Insurer of its obligations under the policy.

   (b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in s. NR 664.0147 (6) or 665.0147 (6), Wis. Adm. Code.

   (c) Whenever requested by the Wisconsin Department of Natural Resources, the Insurer agrees to furnish to the Department a signed duplicate original of the policy and all endorsements.

   (d) Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the hazardous waste management facility, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Department, and if the facilities covered by this insurance are in more than one state, each state agency regulating hazardous waste or the EPA Regional Administrator if the facility is located in an unauthorized state.

   (e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of 30 days after a copy of written notice is received by the Department, and if the facilities covered by this insurance are in more than one state, each state agency regulating hazardous waste or the EPA Regional Administrator if the facility is located in an unauthorized state. I hereby certifiy that the wording of this instrument is identical to the wording specified in s. NR 664.0151 (10), Wis. Adm. Code, as the rules were constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.



David Russo
Regional Manager, Environmental
Authorized Representative of Lexington Insurance Company
1650 Market Street, Suite 3700, Philadelphia, PA 19103

A p p e n d i x H

Construction Documentation and Operation, Maintenance, and Monitoring Plan

VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.

MENOMONEE FALLS, WISCONSIN

Environmental Consultants
and Contractors

2830 Dairy Drive
Madison, WI 53718-6751

608 224-2830
FAX 608 224-2839
www.scsengineers.com

SCS BT SQUARED

October 3, 2012
File No. 25211318.58

Mr. Mike Zillmer
Wisconsin Department of Natural Resources
2300 N Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53212-3128

Subject: Construction Documentation and OM&M Plan
Low Level VOC Impact Area Remedial Action Project
WMWI Parkview RDF
Menomonee Falls, Wisconsin
BRRTS #02-68-553602

Dear Mr. Zillmer:

On behalf of Waste Management of Wisconsin, Inc. (WMWI), SCS BT Squared is submitting the enclosed Construction Documentation and OM&M Plan for the Low Level VOC Impact Area Remedial Action Project. We are requesting that the Wisconsin Department of Natural Resources approve this Construction Documentation and O&M Plan.

Please call me if you have any questions or requested modifications on the enclosed report.

Sincerely,

Thomas J. Karwoski, PG
Senior Hydrogeologist
SCS BT SQUARED

Leslie Busse, PE
Project Manager
SCS BT SQUARED

TK/TLC/LAB

cc: Mr. Gerard Hamblin, WMWI
Mr. Dan Otzelberger, WMWI
Mr. Greg Konsionowski, WMWI
Mr. Bob Pietsch, Veolia Environmental Services
Mr. Mark Drews, Wisconsin Department of Natural Resources

Enclosures: Construction Documentation, Operation, Maintenance, and Long-Term Monitoring Plan

I:\3185\Reports\VOC Impact Area Documentation\Remediation Documentation Report.doc

Low Level VOC Impact Area Remedial Action Project
Menomonee Falls, Wisconsin

Prepared for:

Waste Management of Wisconsin, Inc.
W124 N9355 Boundary Road
Menomonee Falls, Wisconsin 53051

Prepared by:

SCS BT SQUARED
2830 Dairy Drive
Madison, Wisconsin 53718-6751
(608) 224-2830

October 2012
File No. 25211318.58

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1.0 INTRODUCTION

This document provides documentation of remediation well VRW01, an operation and maintenance plan (OM&M), and a monitoring plan. Installation of a groundwater collection trench with a geomembrane wall and a sump with an extraction pump was recommended in the August 30, 2010 Remedial Action Options Report. Details of the collection trench were presented in the May 27, 2011 Design Plan. Construction of the collection trench was attempted on November 29, 2011. Due to saturated, flowing sands located on the north side of the remedial action area, the trench could not be installed as planned.

As an alternative to the collection trench, Waste Management of Wisconsin (WMWI) proposed to install a groundwater extraction well (remediation well) immediately downgradient of the highest chlorinated volatile organic compound (CVOC) concentrations detected in groundwater. The Wisconsin Department of Natural Resources (WDNR) approved the alternative remedial action. The remediation well was installed on January 3, 2012. Difficulties with the original pump controller led to its replacement with a transducer to control pump cycling. The installation and tuning of the transducer marked the substantial completion of the system on August 10, 2012. This document includes procedures to be implemented from start-up through the life of the remediation and provides general guidelines to operate, maintain, and monitor the system.

1.1 KEY INFORMATION

BRRTS #: 02-68-553602

Site Address: Veolia ES Technical Solutions, LLC
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

Potentially Responsible Party: Mr. Gerard Hamblin, Site Engineer
Waste Management of Wisconsin, Inc.
W124 N9355 Boundary Road
Menomonee Falls, WI 50351

WDNR: Mr. Michael Zillmer
Waste and Materials Management
2300 N Dr. Martin Luther King Jr.
Milwaukee, WI 53212-3128

Mr. Mark Drews
Remediation and Redevelopment
141 NW Barstow St., Room 180
Waukesha, WI 53188

Consultant: Mr. Tom Karwoski, PG, Senior Hydrogeologist
Ms. Leslie Busse, PE, Project Manager
SCS BT Squared
2830 Dairy Drive
Madison, WI 53718
608-224-2830

1.2 SITE SETTING AND HISTORY

1.2.1 Site Location

The CVOCs were detected within the WMWI complex near the Parkview RDF and within the Veolia facility in Section 1, T8N, R20E in the Village of Menomonee Falls, in Waukesha County, as shown on **Figure 1**. The area of interest is south of the closed Parkview RDF and directly north of the existing entrance road/office and scale facilities. Refer to **Figure 2** for a building and site layout.

1.2.2 Site History

The site was used by several property owners for a number of different waste treatment and temporary storage purposes since 1978. A detailed discussion of the site history is provided in the Site Investigation/Remedial Action Options Report (BT Squared, Inc., 2010).

1.2.3 Summary of Previous Information

The following chronology describes the previous activities at the site and reports submitted:

- **March 13, 2008** – CVOCs were detected during the sampling round for Parkview RDF monitoring well S16R (100 feet east of original well nest location).
- **September 2008** – Nine Geoprobe™ (geoprobe) borings were performed at the Veolia facility to evaluate potential sources.
- **November 2008** – Ten additional borings were performed for further evaluation of potential sources.
- **June 2009** – Seven geoprobe borings were added to the investigation for further evaluation of potential sources.
- **April 2009** – Submitted NR 716 Site Investigation Workplan.
- **October 2009** – Five monitoring wells were installed at the Veolia facility to evaluate groundwater elevation, flow direction, and groundwater quality.
- **November 2009 and January 2010** – All wells were monitored.

- **August 2010** – Submitted the Site Investigation/Remedial Action Options Report (SI/RAOP).
- **May 2011** – Submitted the Remedial Action Design, Implementation, and OM&M Plan.
- **March 2012** – Submitted the monitoring results from the January 2012 baseline sampling event.
- **August 2012** – Submitted the monitoring results from the July 2012 annual sampling event along with results from remediation well VRW01.

Based on the information collected, the SI/RAOP concluded the following:

- A thin sand seam, generally 3 to 8 feet thick, exists beneath a portion of the property currently occupied by Veolia.
- The seam underlies discontinuous deposits of sand, silty sand, and clay at a depth of approximately 8 feet below ground surface (bgs).
- Approximately 30 feet of clay till separates the impacted shallow sand seam from another intermediate sand seam beneath it.
- There is no evidence of CVOC impacts to the lower, intermediate sand seam.
- There were no significant CVOC concentrations detected in any of the site investigation borings.
- Groundwater generally flows to the southwest within the shallow sand seam.

1.3 SITE HYDROGEOLOGY

The water table in the area of interest occurs within glacial deposits of the Oak Creek Formation. The Oak Creek Formation is mostly comprised of a silty clay till interbedded with both continuous and discontinuous coarse-grained sands and gravels. The approximate thickness of the Oak Creek Till in the area of investigation is approximately 110 feet bgs.

A shallow, silty sand and gravel deposit is located beneath most of the investigation area (**Figures 5** and **6**). The depth of the coarse-grained deposit is approximately 8 feet bgs. It ranges in thickness from 1 to 5 feet. An intermediate coarse-grained deposit has been identified under portions of the existing and proposed East Expansion to Orchard Ridge RDF. However, this intermediate coarse-grained deposit is not present beneath the area of investigation. A deep, coarse-grained deposit does exist approximately 55 feet bgs in the area of investigation.

The water table within the Oak Creek Formation is quite shallow and mimics the surface topography. The depth to water is approximately 5 to 8 feet bgs. The groundwater flow direction within the shallow sand seam beneath the site is to the west-southwest. The

groundwater flow direction in the deeper intermediate sand layer within the Oak Creek Formation is generally to the east. The Oak Creek Formation is not believed to be utilized as a source of water for private, municipal, or industrial supply wells.

The Silurian Dolomite aquifer is the main source of water in the vicinity of the site and is present at a depth of approximately 110 feet bgs. The Silurian Dolomite aquifer is the preferred source of water due to its shallow depth. The aquifer is under semi-confined conditions, except in areas where glacial deposits are relatively permeable. Groundwater flow within the dolomite aquifer is toward the southeast and occurs primarily through fractures and solution cavities within the rock.

2.0 DESIGN AND SYSTEM OPERATION

2.1 SYSTEM DESCRIPTION

As discussed in **Section 1.0**, the recommended remediation for the site was a groundwater collection trench. However, flowing sands prevented the trench installation from being completed. Instead, a groundwater extraction well (remediation well) was proposed to remove volatile organic compound (VOC)-impacted groundwater from the site. The following sections provide a general description of the remediation system and design basis for the equipment selection and sizing.

The remediation system consists of a groundwater extraction well with pump, transducer, associated controls, and double contained transport piping that discharges to nearby leachate control system. See **Figure 2** for the system layout.

2.1.1 Remediation Well Design and Specifications

The remediation well (VRW01) was designed to intercept the shallow sand seam downgradient of the VOC impact area. The well is 21 feet deep in a 3-foot-diameter borehole (**Figure 3**). The stainless 10-foot-long screen is 12¾ inches in diameter, manufactured by Johnson Well Screens. The boring log and calculations for slot and filter pack sizing are in **Appendix A**.

The remediation well is equipped with a transducer set approximately one inch from the bottom of the well. The transducer is wired to a controller on a panel adjacent to the well. The controller is set to turn the pump on when there are 9 feet of groundwater in the well and turn off when groundwater is pumped down to 2 feet. An hour meter on the panel indicates the number of hours of pump run time in hours and tenths of an hour.

2.1.2 Pump Specifications

The Grundfos Redi-Flo4 submersible pump, model 10E5, was chosen to move the extracted groundwater from to the Parkview Landfill leachate collection system. This pump is rated to operate at 5 to14 gallons per minute (gpm). The pump is powered by a 1 hp, 230v, 1-phase electric motor. The pump is currently set to pump at approximately 4.1 gpm to maximize the cycling efficiency of the remediation system. The Grundfos pump specifications are included in **Appendix B**.

2.1.3 Groundwater Transport Pipe

The groundwater transport pipe directs the extracted groundwater approximately 350 feet northwest to the existing Parkview RDF leachate control system. The transport piping is a double containment system constructed of 2-inch high density polyethylene (HDPE) pipe inside of a 4-inch HDPE pipe. The pipes are buried within a 5-foot-deep gravel-lined trench. The pipes run through a 4-foot-diameter HDPE control valve manhole located approximately 6 feet from the well. A ball-valve shut-off control is accessible through the manhole. The valve has an extension so it can be operated safely at the surface of the manhole.

3.0 CONSTRUCTION

3.1 GROUNDWATER REMEDIATION WELL INSTALLATION

The groundwater remediation well was installed on January 3, 2012, by Terra Engineering with oversight by SCS BT Squared (SCS). A permanent submersible pump along with a controller was installed in the well on February 16, 2012. The pump was connected to an electrical control panel with a Coyote controller. After repeated attempts to achieve efficient pump cycling, the Coyote controller was replaced with a transducer. The transducer was installed on August 10, 2012. The pump cycling was optimized to about 10 cycles per 24 hours. Approximately 41 gallons are removed with each cycle at a rate of 4.1 gpm. The boring log is included in **Appendix A**. Well construction is shown on **Figure 2**. Photos of the remediation system construction are located in **Appendix C**.

3.2 GROUNDWATER TRANSPORT PIPING

Trenching and installation of the double contained groundwater transport piping and valve control manhole was performed by Terra Engineering with oversight by WMWI on January 25 and 26, 2012.

4.0 OPERATION, MAINTENANCE, AND MONITORING

4.1 OPERATION AND MAINTENANCE

During each scheduled visit, the operator should perform a general inspection of the system. The control/status panel should be checked for alarms and proper operation. Equipment and piping should be checked for leaks and wear. If a leak or an abnormal operating condition is detected, the system should be shut down and the situation corrected. Any items requiring attention should be noted in the dedicated field book and reported to the engineer.

Pump on lights, high level alarm, liquid level display, and hour meter should be checked and the readings should be recorded in the field book. A summary of the cleaning, maintenance, and monitoring tasks completed during each visit should be recorded in the field book.

4.2 MONITORING PLAN

The monitoring plan will encompass all eight existing monitoring wells. All monitoring wells are instrumented with dedicated bailers for sampling. A baseline round of sampling was performed on January 12, 2012, prior to the start of the remediation activities. The baseline sampling report was submitted to the WDNR on March 14, 2012 (**Appendix D**). Samples are analyzed for VOCs and natural attenuation (NA) parameters. The NA parameters are evaluated to determine the aquifers' ability to provide natural degradation of the CVOCs in groundwater. The list of NA analytes includes dissolved iron, total organic carbon (TOC), alkalinity, pH, nitrate+nitrite, sulfate, and ethane, ethene, and methane gases.

The complete round of monitoring at eight wells, for VOCs and NA parameters, will be repeated on an annual basis until site closure is achieved. All results will be evaluated in accordance with NR 140. The first annual sampling round was collected on July 10, 2012, and a report was submitted on August 16, 2012 (**Appendix D**). The baseline sample for remediation well VRW01 was taken on March 12, 2012 (**Appendix D**).

Prior to the next annual sampling round, WMWI may propose to remove some of the monitoring wells from the program if the existing data indicates there are individual locations that do not provide crucial performance data for the remedial activities.

4.3 RECORD KEEPING AND REPORTING

4.3.1 Recordkeeping

WMWI will keep records of the operations, i.e., pumped volumes, as well as any problems, shutdowns, or malfunction of the system. The maintenance activities as discussed above will be recorded as well.

4.3.2 Reporting

4.3.2.1 Progress Reports

Progress reports will be submitted quarterly with the first one due three months after the startup of the RA. Due to the issues encountered with replacement of the controller and tuning of the extraction system, the true system start-up was on August 10, 2012, when the transducer was installed to replace the Coyote controller. The reports will include the following:

- Brief discussion of the progress.
- Discussion of problems, shutdown, malfunctions, etc.
- Evaluation of the effectiveness of the system.
- Recommendations for future activities, if applicable.
- A site map.
- Sufficient tables, graphs, and/or figures to summarize relevant data and pertinent measurements.

- Completed O&M reporting form supplied by the Department (to be submitted semi-annually).

4.3.2.2 Monitoring Reporting

A written monitoring report will be submitted annually within 60 days of the annual monitoring event. The monitoring report will include:

- A cover letter that includes the date, purpose of the submittal and desired action, a brief narrative, the WDNR identification number, and the regulatory status of the site.
- All sampling results on forms provided by WDNR (electronically).
- A tabulated summary of current and past monitoring results.
- Laboratory analytical reports and sample chain of custody forms.
- Identification of environmental standards that have been attained or exceeded, and a map showing locations where exceedances occur, as well as cause and significance of this.

5.0 PERMITS AND APPROVALS

Because the extracted groundwater will be discharged directly into the Parkview RDF leachate control system, no permitting is expected to be required.

6.0 APPLICABLE ENVIRONMENTAL REGULATIONS

The following regulations will be observed to ensure that the operation of the remediation system does not negatively impact public health or the environment:

- NR 700 – Comprehensive Environmental Cleanup Code
- NR 140 – Groundwater Quality
- NR 141 – Groundwater Monitoring Well Requirements

The system will be operated in conformance with the NR 700 regulations. Reporting to the WDNR on system performance will be conducted in accordance with NR 700. The monitoring wells were constructed in conformance with NR 141 standards. Sampling and analysis of groundwater monitoring wells will be conducted in conformance with NR 140 regulations.

7.0 SITE CLOSURE

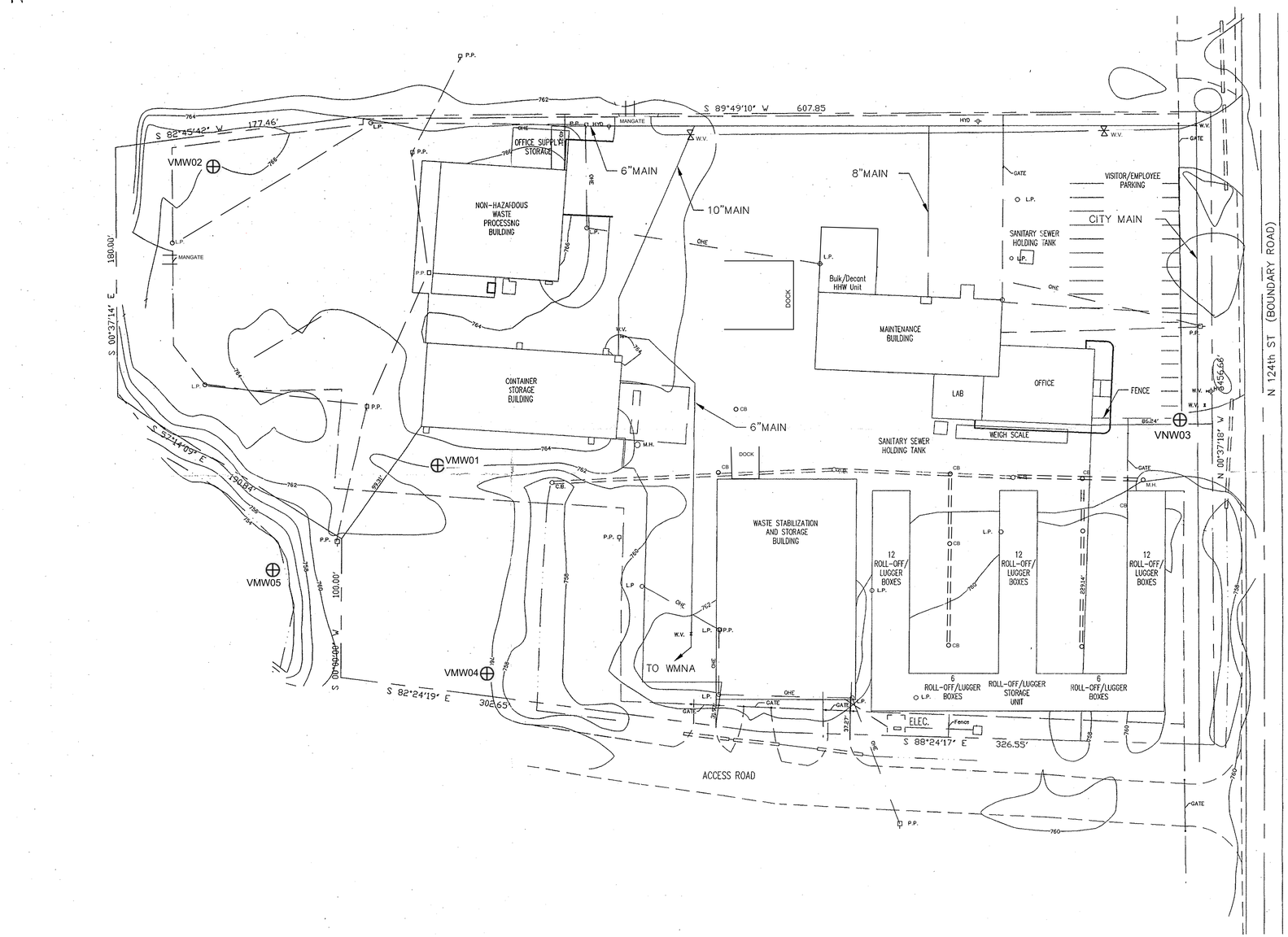
Site closure will be requested when concentrations show a stable or declining trend for a sufficient period of time and potential risks to the health and welfare of potential affected receptors have been eliminated or reduced to acceptable levels. The estimated time to achieve

closure with this remedy is approximately 2 to 3 years. It is likely that some concentrations of CVOCs will remain in the soil and groundwater after site closure. Notification on the Geographic Information System Registry database will therefore likely be required by the WDNR. When site closure is approved, monitoring wells will be abandoned.

8.0 REFERENCES

BT Squared, Inc., 2010, Site Investigation/Remedial Action Options Report – Monitoring Well S16R CVOCs Impact Area, WMWI Parkview Landfill, Menomonee Falls, Wisconsin, August 30, 2010.

BT Squared, Inc., 2011, Remedial Action Design, Implementation, and Operating, Maintenance, and Monitoring Plan – Monitoring Well S16R Impact Area, WMWI Parkview Landfill, Menomonee Falls, Wisconsin, May 27, 2011.



LEGEND

- HYD HYDRANT
- MONITORING WELL
- P.P POWER POLE
- L.P. LIGHT POLE
- M.H. MANHOLE
- W.V. WATER VALVE
- FACILITY BOUNDARY
- CONTOUR LINE (2 foot)
- WATER MAIN
- OVERHEAD ELECTRIC LINE
- BUILDING BOUNDARY
- DRAINAGE
- ACCESS ROAD

0' 40' 80'

SCALE 1"=40'-0"

NOTES

REV. NO.	CODE CIRCLES	DATE	DESCRIPTION	SEC APPROVED
	REV. BY		NOTE: CIRCLE ALL REVISIONS, IDENTIFY WITH DIAMOND, NUMBER AND ARROW. REMOVE ONLY CIRCLE AND ARROW BEFORE NEXT REVISION.	

A	PRELIMINARY	C	MAT'L T.O.	F	CONST'N
B	DESIGN	D	MAT'L PURC.	G	
		E	BIDS	H	

SEAL

SIGNATURE

06/03/2013

DATE

DR.	DATE
DSGN.	SEC FILE NUMBER
CK.	
DPE	JOB NO.
CAD FILE NO.	

Veolia ES Technical Solutions, L.L.C.
W124 N9451 Boundary Road
Menomonee Falls, WI 53051

DRAWING TITLE

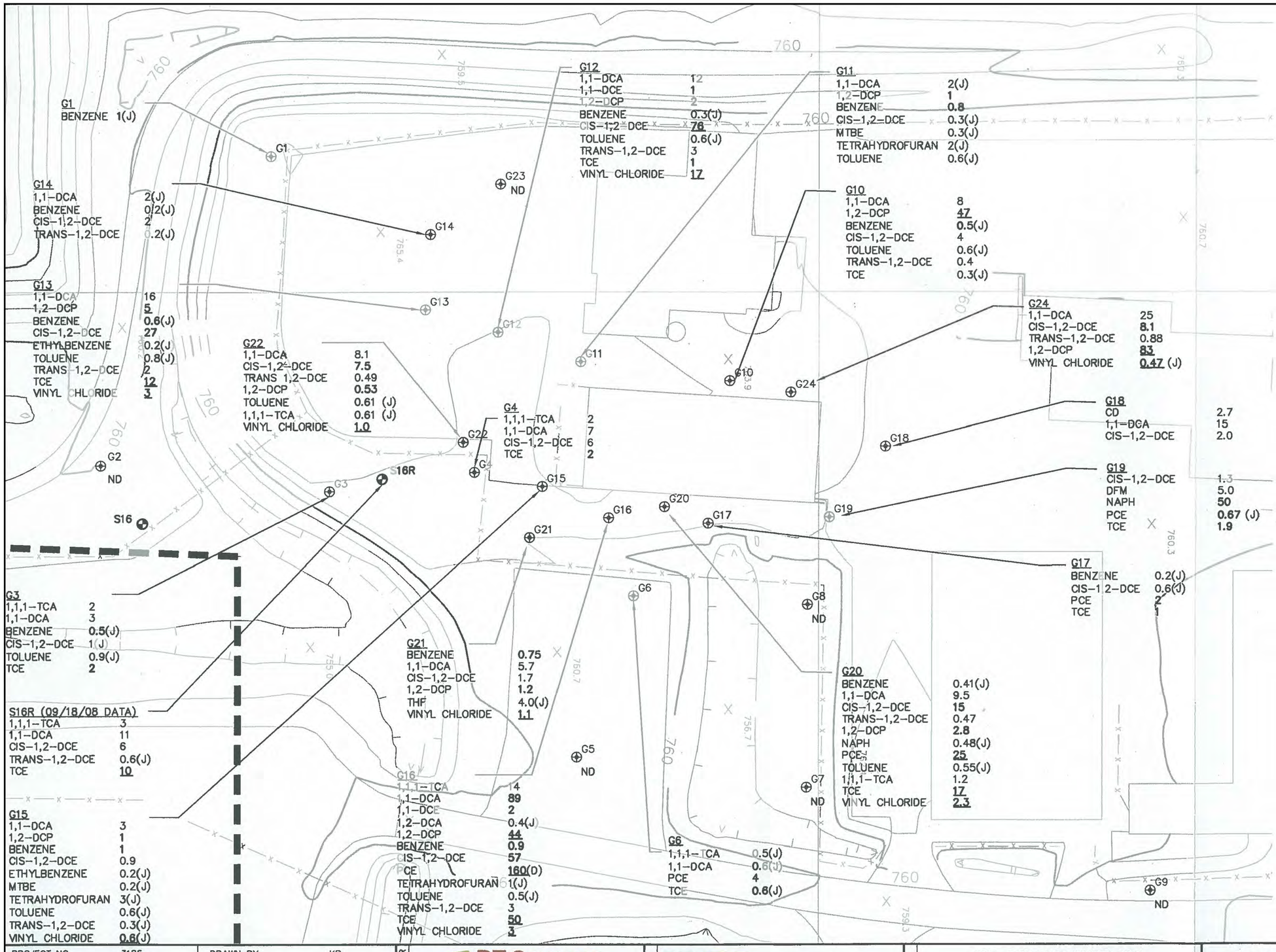
Monitoring Well Locations

CLIENT DRAWING NUMBER

Figure H-1

SEC DRAWING NUMBER

EM1977-SL-02



LEGEND

⊕	GEOPROBE SOIL BORING
⊕	MONITORING WELL
ND	NO DETECT
(D)	SECONDARY DILUTION FACTOR
(J)	ESTIMATED CONCENTRATION
- - -	LIMITS OF PROPOSED EXPANSION
1,1,1-TCA	1,1,1-TRICHLOROETHANE
1,1-DCA	1,1-DICHLOROETHANE
1,1-DCE	1,1-DICHLOROETHENE
1,2-DCA	1,2-DICHLOROETHANE
1,2-DCP	1,2-DICHLOROPROPANE
CIS-1,2-DCE	CIS-1,2-DICHLOROETHENE
MTBE	METHYL-TERT-BUTYL ETHER
PCE	TETRACHLOROETHENE
TRANS-1,2-DCE	TRANS-1,2-DICHLOROETHENE
TCE	TRICHLOROETHENE
DFM	DICHLORODIFLUOROMETHANE
CD	CARBON DISULFIDE
NAPH	NAPHTHALENE

NOTES:

1. GEOPROBE BORINGS WERE INSTALLED BY MORAINE ENVIRONMENTAL ON 09/17/08 (G1-G9) AND 11/11/08 (G10-G17), AND 6/29/09 (G18-G24) UNDER THE SUPERVISION OF BT², INC.
2. ALL CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/l).
3. BOLD VALUES MEET OR EXCEED THE NR 140 PREVENTIVE ACTION LIMIT FOR THAT COMPOUND. BOLD AND UNDERLINED VALUES MEET OR EXCEED THE NR140 ENFORCEMENT STANDARD FOR THAT COMPOUND.
4. ACETONE AND 2-BUTANONE (ALSO KNOWN AS MEK) ARE NOT SHOWN BECAUSE THEY ARE COMMON LABORATORY CONTAMINANTS.
5. THE GROUNDWATER SAMPLE FOR G16 EXCEEDED THE INSTRUMENT CALIBRATION RANGE FOR PCE. THEREFORE THE CONCENTRATION OF PCE REFLECTED ON THIS FIGURE IS FROM THE SECONDARY DILUTION FACTOR.

N

60 0 60

SCALE: 1" = 60'

PROJECT NO.	3185	DRAWN BY:	KP
DRAWN:	10/01/08	CHECKED BY:	TM
REVISED:	12/03/08	APPROVED BY:	TK 08/30/10

ENGINEER: BT SQUARED, 2830 DAIRY DRIVE MADISON, WI 53718-6751, PHONE: (608) 224-2830

CLIENT: WASTE MANAGEMENT OF WISCONSIN

SITE: WELL S16R CVOC IMPACT AREA, WMWI PARKVIEW RDF, WAUKESHA COUNTY, WISCONSIN

GEOPROBE AND MONITORING WELL S16R GROUNDWATER SAMPLING RESULTS

FIGURE H-2

I:\3185\Drawings-General\east Expansion\SIWSBORING RSLT.dwg, 8/30/2010 1:45:12 PM