

**BEFORE THE STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES**

**FINAL DETERMINATION
FEASIBILITY AND PLAN OF OPERATION REPORT**

**BRENNTAG GREAT LAKES, LLC
EPA ID# WID023350192
FID# 268148210**

GENERAL FACILITY INFORMATION

Facility Name, Operator and Address

Brenntag Great Lakes, LLC
Judy Ninke, Manager of Solvent Reclamation Facility
N59 W14706 and N59 W14776 Bobolink Ave
Menomonee Falls, WI 53051

Facility Owner

Brenntag Great Lakes, LLC
4420 N. Harley Davidson Avenue
Wauwatosa, WI 53225

Property Owner

Brenntag Great Lakes, LLC
4420 N. Harley Davidson Avenue
Wauwatosa, WI 53225

Facility Location

County: Waukesha
City/Town/Village: Village of Menomonee Falls
Legal Description: SW1/4 of the SE 1/4 of Sec 3, T26N, R9E
Lat/Long: Latitude: 44° 45' 26" N, Longitude: 91° 27' 28" W

Facility Contacts

Judy Ninke, Manager of Solvent Reclamation Facility, 262-252--6464, jninke@brenntag.com

License Hazardous Waste Storage and Treatment Units

Unit Location	Unit Name	Unit Type	License Number	Net Capacity	Units	Container Storage Capacity not to Exceed
Container Storage /10-Day Transfer Building	Container Storage Room - South	Container Storage	6017	Total facility storage capacity not to exceed 55,000	Gallons	1,000 55-gallon drums
	Container Storage Room - North	Container Storage	6017			192 55-gallon drums
Fuel Blending Area	Fuel Blending Area	Container Storage	6017			6,000 gallon tanker limited to 96 hours of storage
	Fuel Blending Area	Container Treatment	4397	18,000	Gallons per day	18,000 gallon per day

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FACILITY DESCRIPTION AND OPERATION

General Location

Brenntag is located at N59 W14706 and N59 W14776 Bobolink Ave, Menomonee Falls, WI 53051, which is located within the Village of Menomonee Falls. The Village of Menomonee Falls is located along most of eastern border of Waukesha County. Based on the 2010 census, the Village of Menomonee Falls has a total population of 35,626.

Waukesha County has a total area of 580 square miles, of which 555 square miles is land and 25 square miles is water. Waukesha County consists of eight (8) cities, twelve (12) towns, eighteen (18) villages and twenty-one (21) unincorporated communities.

Zoning

Brenntag is a 6.9-acre site that is currently zoned I2 (Heavy Industrial). Brenntag is surrounded by properties that are zoned for heavy and light industrial use. There are single-family residential areas within .5 mile to the north and within .5 mile to the southwest.

Facility Description and Operation

Brenntag operates a licensed hazardous waste storage and treatment facility at N59 W14706 Bobolink Avenue, which is located on the north side of Bobolink Avenue. Brenntag's office and chemical distribution facility are located on the south side of Bobolink Avenue at N59 W14776 Bobolink Avenue.

Brenntag's corporate headquarters is located adjacent to their chemical warehouse facility in Wauwatosa, Wisconsin. Due to limited office space at the Menomonee Falls Facility and due to its close proximity, many of Brenntag's personnel have offices located remotely at the Wauwatosa headquarters building, which is located at 4420 North Harley Davidson Avenue in Wauwatosa, Wisconsin. Only current year hazardous waste documentation and records are maintained at the Wauwatosa headquarters building in the office of the Regional Manager of Environmental Services. All past years records are maintained on site at the Menomonee Falls Facility.

Midwestern customers served by Brenntag typically include: paint manufacturers, can coating companies, automobile dealerships, auto repair facilities, label and screening companies, container manufacturers, semi-trailer manufacturers, plastics companies (molded), metal finishing operations and various manufacturers involved in the automotive field.

Brenntag currently operates 24 hours per day Monday through Friday and limited hours on the weekends.

Background

In 1974 Milwaukee Solvents & Chemicals Corp (Milsolv) began providing services in the areas of solvent sales and recycling for Milsolv's customers that were located primarily in upper Midwest (Wisconsin, Michigan, Iowa, Indiana, Nebraska, Minnesota, and Illinois) of the United States. On June 30, 1998, Milsolv was purchased by Brenntag. In November of 2000, Milsolv and two other mid-western independent distributors formed Brenntag, which is a member of the Brenntag North America group of companies. Brenntag changed the Milsolv name to Brenntag Great Lakes, LLC on July 23, 2001.

Description

Brenntag's licensed hazardous waste facility and the chemical distribution facility are bifurcated by Bobolink Avenue. Brenntag's facility consists of the following buildings, structures and areas:

North Lot

The North Lot of the facility is approximately 2.1 acres and is currently used for the storage and fuel blending of waste solvents. Historically, solvent recovery operations were conducted on the South Lot of the facility. In 1981, solvent recovery operations were transferred to the North Lot. Storage and processing of hazardous waste now only occurs on the North Lot. The South Lot is currently used to formulate, package, store and prepare chemical products for shipment.

An office/warehouse building is located in the western portion of the North Lot. The facility used to have solvent recovery equipment, consisting of 2 LUWA thin-film evaporators that were located in the northern portion of the North Lot. The facility used to have a hazardous waste tank farm that was also located in the northeast corner of the North Lot. The hazardous waste tank farm was closed in November of 2014. A canopy for the storage of drums and equipment is located south of the tank farm. The majority of the site is paved with concrete or asphalt, and is used for parking and loading/unloading of semi-trailers and tankers. Employee parking is located south of the office/warehouse building. A limited area of grass is located between the tank farm and canopy and between the south side of the North Lot and Bobolink Road. The North Lot is surrounded by chain link fencing for security.

South Lot

The South Lot is approximately 4.8 acres. An office/warehouse building is located in the south-central portion of the South Lot. A bulk tank storage facility is located in the western portion of the South Lot. A railroad spur runs along the southern portion of the South Lot, terminating at the southeastern corner of the facility. A canopy runs along the southern portion of the facility, extending from the railroad spur to the bulk tank storage facility. Above grade piping connects the railroad spur to the warehouse and bulk tank storage facility. The remainder of the facility is paved with concrete and asphalt, and is used to stage semi-trailers. The South Lot is surrounded by chain link fencing for security.

Chemical products serving as the raw materials for the facility's production operations are brought to the South Lot via rail car and semi tankers. Chemical products are transferred from rail cars staged on the railroad spur to the bulk tank storage facility and warehouse via above grade piping. Tanker trucks are staged at a covered loading/unloading area located north of the bulk tank storage facility. Blending, formulation and packaging activities are completed in the warehouse area.

Chemical Distribution

Brenntag's chemical distribution facility (NAICS Code 42469) provides customers worldwide with chemicals. The main activities conducted at this location include purchasing of chemicals in bulk and repackaging into smaller containers, or blending raw material chemicals to produce blended chemicals prior to packaging and distribution. Brenntag purchases raw materials in bulk railcars or tankers, stores raw materials in their chemical tank farm, and repackages blended or raw materials into tankers, totes, or drums for further distribution.

Waste Generated from Chemical Distribution

Brenntag's chemical distribution facility is classified as a Large Quantity Generator (LQG) of hazardous waste. The chemical distribution facility generates hazardous waste mainly through equipment flushes and cleanouts. These process residuals are initially accumulated in totes and drums. The storage of these containers meets the LQG accumulation requirements found in s. NR 662.034(1) Wisconsin Administrative Code (WAC). Prior to 90 days, process residuals are either sent to Brenntag's hazardous waste storage facility or directly sent off-site for solvent recovery, energy recovery at cement kilns or thermal destruction through incineration.

Hazardous Waste Operations

Storage of hazardous wastes at the facility occurs in containers in the Container Storage Room, which is located in the Storage /10-Day Transfer Building. The fuel blending (treatment) of hazardous waste occurs in tanker trucks in the fuel blending area, which is located directly west of the former hazardous waste tank farm.

Water and Sewer

Brenntag is serviced by municipal water supply and sewerage systems. Three private water supply wells are located on the site, and several non-potable water supply wells are located on adjacent properties. The facility and surrounding properties had been previously serviced by these private water supply wells, which are no longer used for this purpose. The area has been converted to the municipal water supply system. The private wells remain in place, and are sampled to evaluate groundwater quality.

Waste Analysis Plan

The Waste Analysis Plan (WAP) identifies the necessary sampling methodologies, analytical techniques, pre-acceptance procedures, incoming load procedures, process operations procedures and quality control policy for all hazardous wastes that enters Brenntag for storage and treatment. The types of wastes accepted at Brenntag are primarily organic materials that are suitable for either fuel blending or reclamation. The complete list of the designated hazardous waste codes for the hazardous waste that can be handled at Brenntag can be found in the most recent Hazardous Waste Permit Application, Part A, submitted to the Department. Brenntag does not accept corrosive wastes ($\text{pH} \leq 2.0$ or ≥ 12.5) or reactive wastes.

When a waste shipment arrives at Brenntag for storage and/or treatment, a determination has previously been made by the generator that the waste is either a listed hazardous waste or a characteristic hazardous waste. The generator provides Brenntag with Brenntag's Customer Profile Sheet and a TC Rule Certification/Recertification Form (Profile) and a representative sample of the hazardous waste.

Representative samples are taken from each container and each compartment of every tanker load accepted at Brenntag. The individual samples from each generator's waste stream are then composited and submitted to Brenntag's on-site laboratory for analysis.

Occasionally, Brenntag allows on-site approvals of hazardous waste streams. This may happen if the customer is far away or if there is a spill and Brenntag is contacted to pick up the waste from the spill. Under this scenario, Brenntag will assign the waste a Profile number, pick up the waste and bring it on-site, and then sample the waste for approval prior to further processing or disposal.

The Profile and sample provides Brenntag with information concerning both the distribution and the nature of the waste components. Brenntag's sampling and analysis is to ensure that the shipped waste matches the overall identity of the waste designated on the accompanying manifest (or shipping paper) and/or the pre-acceptance paperwork. The analysis will also help ensure that the appropriate storage and/or treatment techniques are utilized. The Profile is reviewed and approved only after it has been determined that sufficient information has been presented for proper processing at Brenntag. Tankers, which have a waste analysis number older than 1 year from the date of receipt, are subject to requalification. All other wastes are subject to requalification if the waste analysis number is older than 2 years.

The following waste analyses are performed by Brenntag for initial waste stream qualifications and requalifications:

1. Initial Description, including phases/layers, is for identification of physical characteristics and for waste material classification. The pH and the color of each phase/layer are recorded.
2. Laboratory Distillation and Percent Recovery is intended to identify any unusual problem(s) that may occur while distilling a particular waste stream. By exposing a laboratory sample to the heat of the distillation operations, characteristics that inhibit recovery of a particular waste solvent can be observed. The laboratory distillation and percent recovery determine whether a particular waste material has recovery potential and any resale value.
3. Water Content has been selected because it is critical to the waste's potential reclamation value. Varying amounts of water are found in virtually all waste solvents. Depending on a particular waste's solvent composition, the presence of excessive water may make the reclaimed solvent unusable. Percent water is also crucial for disposal of wastes. The disposal facilities used by Brenntag have varying limits on the

waste materials they can accept. Secondary fuel disposal sites typically impose a surcharge for disposal if the percent water exceeds a maximum value.

4. Specific Gravity is required for tank storage and transportation. It is used to estimate the weight of materials being shipped.
5. pH is monitored for several reasons. The first is to insure that the waste material is properly categorized and is not a corrosive hazardous waste. The pH of a substance is also critical for storage of waste materials in metal containers and tanks. An excessively acid pH may cause a reaction with the metal containers or tanks. An excessively basic pH may cause a reaction with other wastes.
6. Flash Point may be checked to determine if the waste is flammable.
7. Heat of Combustion is crucial for disposal of wastes. The disposal facilities Brenntag uses have varying limits on the waste materials they can accept. Secondary fuel disposal sites typically impose a surcharge for disposal if the BTU per pound drops below their set value.
8. Solvent Composition is one of the most crucial parameters for the solvent reclamation operation. It provides information on the chemical composition including identification of the various solvent components that are present. This information is required to safely handle the solvent, determine any potential reuse for the reclaimed solvent, and to prepare a Safety Data Sheet (SDS). This analysis provides the waste material classification.

Requalification includes having the generator complete a TC Rule Certification Form and submittal of a sample for analysis by Brenntag.

The following waste analyses are performed by Brenntag for approved wastes:

1. PCB Screening is conducted for each tanker or each drum lot to make sure waste materials are not contaminated with PCB's above the regulatory limit of 50 ppm.
2. pH is checked to insure that the waste is not corrosive. An excessively acid pH may cause a reaction with other wastes or with the metal storage containers and tanks. An excessively basic pH may cause a reaction with other wastes. Brenntag is not licensed to store corrosive wastes.
3. Radioactivity is checked to confirm that the waste is not radioactive. Brenntag is not licensed to store radioactive wastes.
4. Reactivity is tested to determine compatibility with other wastes stored at the facility. It is also a critical parameter in safe handling and storage of the waste. Brenntag is not licensed to store reactive waste.

Brenntag's in-house laboratory is currently registered with the Department and certified to perform the following tests:

- Corrosivity (pH)
- Ignitability (Flashpoint)
- Reactivity
- PCBs
- Fingerprinting (Requalification Program)

An outside laboratory is used for the following analytical tests:

- All items listed on TC Rule Certification Form
- PCB Quantification

The above sampling and analytical procedures 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/or 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.

Waste Handling

The types of wastes accepted at the Brenntag facility are primarily organic materials that are suitable for either fuel blending or reclamation. All hazardous wastes arriving at Brenntag are received at the office where the manifest and shipping papers of each waste load are reviewed. Waste received by Brenntag, are sampled and analyzed in accordance with the WAP to ensure the waste conforms to the manifest and the pre-shipment characterizations.

Containers of hazardous wastes consisting mostly of 55-gallon drums and totes that are delivered to Brenntag by enclosed semi-trailers. These containers are removed from the semi-trailers with a fork-lift or hand truck and the containers destined for storage are then sampled and analyzed for parameters listed in the WAP. When the container is accepted by the laboratory, a unique tracking number is placed on the container and it is then processed into the hazardous waste storage facility (drum storage and processing building).

Non bulk containerized wastes handled at Brenntag:

1. Waste material for distillation off-site (with the distillate for resale to any organization that can use it).
2. Waste material for distillation off-site (with the distillate for direct return to the customer).
3. Waste materials for fuels blending (with suitable BTU value and substantial free liquids).
4. Waste materials (hard solids) for fuels blending with suitable BTU value and little or no free liquids. (These drums would be sent off site).
5. Liquid waste materials with low BTU value. (This material would be sent off site for treatment at a licensed facility).
6. Solid waste materials with low BTU value. (This material would be sent off site typically in drums to another TSD facility for further processing or to a licensed incinerator for incineration).

Bulk containerized wastes handled at Brenntag:

1. Waste material for distillation off-site (with the distillate for resale to any organization that can use it).
2. Waste material for distillation off-site (with the distillate for direct return to the customer).
3. Waste materials for fuels blending (with suitable BTU value).
4. Waste materials with low BTU value. (This material would be sent off site, typically in bulk, for treatment at a licensed facility).

Containers of higher BTU liquid waste can also be transferred directly into tankers. The containers are stored in the Container Storage/10-Day Transfer Building until there is a large enough quantity to justify calling for a vacuum tanker, which typically occurs once per week. Brenntag contracts with a licensed hazardous waste transporter to supply an empty and clean 6,000 gallon vacuum tanker. All vacuum tanker loading activities take place within the fuel blending area, which is located west and immediately adjacent of the tank farm. Loading of the vacuum tanker is accomplished by bringing containers from the drum storage room to the fuel blending area. Upon arrival, Brenntag personnel conduct an inspection of the vacuum tanker and loading area to review the condition of the vacuum tanker, grounding cables, vacuum pump, hoses and containment area. A grounding cable is attached from the vacuum tanker to each container that is being loaded onto the vacuum tanker to prevent static discharge. The container is opened and a vacuum hose, equipped with a wand, is used to vacuum out the contents of each container. The container is immediately closed when vacuuming is complete.

All openings on the vacuum tanker must be kept closed during the vacuum process in order to maintain the proper vacuum flow condition into the vacuum tanker. The only air emission source during liquid transfer is the exhaust from the vacuum pump. A liquid level control on the vacuum tanker indicates when the vacuum tanker is full. Upon completion, all hoses are capped and properly stored on the vacuum tanker and all hatches and valves are checked to make sure they are properly sealed for transport. Manifest forms are signed and the material is typically transported to an approved cement kiln that uses the waste material as a secondary fuel.

Empty drums are sent to an approved drum reconditioner for recycling or reconditioning into drums for reuse by Brenntag's solvent distribution facility or other drum customers. Totes that are rinsed and considered DOT

emptied are reused on-site for waste product or sent for recertification. Poly totes from generators are only used once, are rinsed and cut up for proper disposal.

When Brenntag is not listed as the designated facility on the uniform hazardous waste manifest the container may be managed under the transfer facility requirements of s. NR 663.12, WAC. The 10-day hazardous waste transfer area is located on the south side of the storage room.

Waste Storage and Treatment Units

Containerized wastes are received and stored at Brenntag for on-site treatment (fuel blending) or transferred off-site to another treatment, storage or disposal facility. These containers can vary in size from 1-gallon pails to 6,000-gallon tanker trailers. Container storage allows Brenntag to accumulate various quantities of each class of waste, so Brenntag can efficiently process these similar wastes through repacking, bulking and off-site treatment. Brenntag operates the following hazardous waste storage and treatment units with capacities as indicated in the table below:

Table 1: License Hazardous Waste Storage and Treatment Units

Unit Location	Unit Name	Unit Type	License Number	Net Capacity	Units	Container Storage Capacity not to Exceed
Container Storage /10-Day Transfer Building	Container Storage Room - South	Container Storage	6017	Total facility storage capacity not to exceed 55,000	Gallons	1,000 55-gallon drums
	Container Storage Room - North	Container Storage	6017			192 55-gallon drums
Fuel Blending Area	Fuel Blending Area	Container Storage	6017			6,000 gallon tanker limited to 96 hours of storage
	Fuel Blending Area	Container Treatment	4397	18,000	Gallons per day	18,000 gallon per day

Container Storage – License # 6017

Container storage at Brenntag occurs in the Container Storage/10-Day Transfer Building. The total storage capacity for the facility is not to exceed 55,000 gallons. All container storage areas are inspected daily to identify leaks, deterioration of containers, cracks in the floor, potential leaks, etc. If material (e.g., accumulated liquids, waste) is discovered in the secondary containment system, the material can be pumped out of the sump or accumulation area using a portable pump to a container.

Container Storage/10-Day Transfer Building

The Container Storage/10-Day Transfer Building is a heated building constructed of steel, masonry and pre-cast concrete and was designed and constructed for storage of flammable materials. The Container Storage/10-Day Transfer Building has been built above surrounding grade so there is no run-on into the building. The Container Storage/10-Day Transfer Building is divided into four main areas consisting of the Storage/10-Day Transfer Room, the Container Storage Room, the Maintenance Shop and the Laboratory, which contains the office and restrooms. The management of incoming and outgoing containers occurs in the loading dock area located on the east side of the Storage/10-Day Transfer Room. The Storage/10-Day Transfer Room is also used for sampling and labeling of containers.

The Container Storage Room is designed to manage up to 1,000 55-gallon drums (55,000 gallons) of hazardous waste using a 3-tier rack system. The north side of the Storage/10-Day Transfer Room is designed to manage up to 192 55-gallon drums (10,560 gallons) of hazardous waste using pallets, which are stacked no more than three high. The south side of the Storage/10-Day Transfer Room is a designated 10-day transfer area used to manage up to 168 55-gallon drums (9,240 gallons) of hazardous waste using pallets, which are stacked no more than three high. Brenntag maintains adequate aisle space within the drum storage and processing building to allow unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of the facility in an emergency.

There is a 2-hour firewall between the Container Storage Room and the Storage/10-Day Transfer Room and a 4-hour firewall between the Container Storage Room and the other areas of the building. The Container Storage/10-Day Transfer Building has a sprinkler system and fire extinguishers that are located at each exit door from the building. There is also an emergency fire hose on the west wall of the Container Storage Room.

The Container Storage Storage/10-Day Transfer areas have concrete floors. All control and construction joints in the floor and in the exterior loading pad were constructed with water stops and concrete sealant material. The floors of the Container Storage and Storage/10-Day Transfer areas are sloped to direct spills to collection trenches and the doorways are ramped to prevent spills from exiting the building. The spill collection trenches gravity drain to conveyance piping that is connected to an exterior, aboveground, 5,925-gallon steel secondary containment tank, which is located near the northeast corner of the Container Storage/10-Day Transfer Building.

The secondary containment tank can hold 10 percent of the total storage capacity. The tank was designed with two compartments to prevent the entire tank from being contaminated by small spills. Spills that are less than 160 gallons will be contained in the first compartment. Larger spills will overflow to the second compartment. The first compartment has a level sensor. If a spill occurs, the level sensor will send a signal to an emergency alarm panel located in the maintenance shop where it will trigger an audible and visual alarm. The audible alarm can be heard both inside and outside the building. The spill collection tank will also function as an oil/water or solvent/water separator in the event of a fire. The tank contains an underflow baffle that will allow water to pass through while lighter materials such as solvents and oils will be retained in the tank. The tank has three manways to allow access for inspection, material sampling, and cleaning purposes.

The concrete pad in the loading dock is curbed and sloped to a collection sump, which can be discharged to the secondary containment tank. It has a secondary containment capacity of 7,911 gallons.

Fuel Blending Area

The fuel blending area is an uncovered pad located west of the former hazardous waste tank farm. In this area, tanker to tanker transfers are conducted with pumps on trucks or with vacuum systems. Tankers are considered containers and are included in the 55,000 gallon volume of hazardous waste storage.

The secondary containment system is constructed of concrete and all cracks have been cleaned and sealed with chemically compatible caulking. The area is bermed with asphalt along the west side to prevent run-on and to contain any spills or leaks. Brenntag estimates that the volume of a spill resulting from a tanker truck release could be cleaned up within a two-hour period. The containment volume is estimated to be approximately 6,000-gallons, plus 2.88 inches of freeboard. Therefore, the largest compartment of a tanker truck (6,000-gallons) would be contained in the event of a spill. The largest volume of waste material normally stored in the tanker trucks is 5,200- gallons, due to weight constraints.

There is a low area located within the fuel blending secondary containment where accumulated precipitation is removed to prevent overflow of the containment area. Accumulated rainwater is typically removed immediately after a storm event, but could be removed within a 24-hour period. Snow that gathers in the fuel blending area's secondary containment is blown into the tank farm for collection, pumping and proper disposal, once it has melted.

Treatment - License # 4397

In a letter dated June 13, 2006, the Department informed Brenntag that the April 22, 1988, recycling exemption for fuel blending would no longer exist under Wisconsin's new hazardous waste rules, which went into effect on August 1, 2006. Fuel blending would be regulated as a treatment activity subject to the licensing requirements under chapter NR 670, WAC. On September 6, 2007, the Department issued a class 2 plan modification to Brenntag to conduct fuel blending activities.

Waste materials that are not suitable for recovery, excess materials, and still bottoms are blended into a supplemental fuel used primarily by cement kilns. Other waste materials falling below the minimum BTU values or falling outside certain specifications are sent off-site for disposal and are not fuel blended. Prior to blending, the waste is sampled and analyzed for compatibility and other parameters as outlined in Brenntag's WAP. The fuel blending occurs in tanker trailers parked directly west of the former hazardous waste tank farm. This area allows for 3 tanker trucks to be parked within the curbed secondary containment system. The maximum fuel blending capacity is 18,000-gallons per day and a maximum processing capacity is 5,200 gallons per batch.

Former Hazardous Waste Units

Brenntag has two hazardous waste units that have closed.

Hazardous Waste Tank Farm

Located on the eastern side of the north lot is an exterior tank farm that consisted of 11 hazardous waste tanks (tank # 71, 72, 73, 74, 75, 76, 77, 78, 79, 80 and 81) that varied in size from 2,000-gallons to 6,000 gallon. This included a 1,300 gallon hazardous waste tank (Tank 75) located inside the Storage/10-Day Transfer Room of the Storage/10-Day Transfer Building. The Department closed out the hazardous waste tank farm in a letter dated November 20, 2014. The tank farm now consists of 7 tanks (T-79, T-80, T-91, T-92, T-93, T-94, and T-95) that are used for raw material or product storage.

North Lot Container Storage Area

Located on the north lot of Brenntag was an exterior container storage area. In a January 5, 1996, approval, the Department approved that the north lot container storage unit concrete pad has been properly decontaminated and partially satisfies the closure performance standards in ch. NR 665, WAC. The Department recognizes that soil and groundwater contamination is being addressed in the ongoing corrective action program.

Universal Waste

Brenntag offers collection services for universal wastes. Closed containers of universal wastes are delivered to the facility and are accumulated in the Container Storage Room prior to offsite shipment. Types of universal wastes managed at Brenntag include spent lamps and bulbs, batteries and mercury-containing devices. Universal wastes are then transported to a destination facility for recycling.

Hazardous Waste Transporter/Transfer – License # 10861

Brenntag offers collection services for hazardous wastes. Closed containers of hazardous wastes are delivered to the facility and are accumulated prior to offsite shipment. These hazardous wastes are then transported to a facility where they can be stored, treated and/or disposed. Brenntag's 10-day transfer facility is located at N59 W14776 Bobolink Avenue, Menomonee Falls, on the south side of the Storage/10-Day Transfer Room. Wastes that are in transport/transfer are not sampled, analyzed, or treated.

Solid Waste Transporter – License # 12547

Brenntag offers collection services for nonhazardous solid wastes. Closed containers of nonhazardous solid wastes are delivered to the facility and are accumulated in the Container Storage/10-Day Transfer Building prior to offsite shipment.

Stormwater – S067875-03-0

Brenntag's site is designed to divert surface water run-on away from the fuel blending area. This area is surrounded by containment dikes and berms. Storm water collected from the fuel blending area is collected and is typically shipped off-site as non-hazardous waste. Run-on into the loading area for the Container Storage /10-Day Transfer Building does not occur due to a slightly ramped approach. A sump pump system is currently in use

on the south side of truck unloading area for removal of precipitation. Brenntag properly disposes of any contaminated precipitation from the truck loading area.

Brenntag's storm water runoff from the non-active portions of the site drains as sheet flow to grass lined swales (drainage ditches) surrounding the site. The drainage ditches on Bobolink Avenue discharge to Lilly Creek. This storm water does not come in contact with waste transfer and processing operations; and therefore, it should comply with water quality standards in NR 102 through 104 WAC.

Currently, Brenntag does not have any discharges to the municipal sanitary sewer system, except for domestic sewage and treated groundwater.

Wisconsin Pollutant Discharge Elimination System – 0046566-05-0

Brenntag has a Wisconsin Pollutant Discharge Elimination System (WPDES) Permit for the discharge of contaminated groundwater to the drainage ditch on the south side of the property. The contaminated groundwater, which is collected from trenches beneath the tank farm can be pumped to Brenntag's Chemical Distribution Facility on the south side of Bobolink Avenue and treated using an air stripper. This system was shut down several years ago but remains operational in case it is needed in the future. The treated groundwater was being discharged to the sanitary sewer system.

Laboratory – 268175490

Brenntag's laboratory is certified under ch. NR 149 WAC; the Wisconsin Certified Laboratory ID is 268175490. Brenntag's laboratory provides basic screening procedures that are used to indicate the expected type of treatment that is most suitable for that particular waste stream and to verify incoming waste shipments. These analytical procedures are designed to identify or screen a specific waste and are a rapid but effective means for establishing key decision parameters required for proper waste management, identification and verification.

Supplemental analyses may be performed as directed by the Laboratory Supervisor or designee to supplement existing information for the waste stream, to further verify a waste stream or to further ensure that the appropriate waste management technique(s) can be utilized.

Air Pollution Control Permits – 268175490-ROPA

Brenntag currently operates under an air permit issued by the Department's air management program. The only pollutants of concern in this permit are volatile organic compounds (VOC). Tanks at the facility are covered by s. NR 419.05 WAC and s. NR 419.06 WAC. The tanks consist of 10 15,000-gallon vertical storage tanks, 18 20,000-gallon vertical tanks, 10 3,000-gallon horizontal storage tanks and 2 tank load out operations and drumming operation. The permit limits size of tanks, throughput of organic liquids and vapor pressures of liquids stored in order to avoid applicability of certain regulations. The facility would need to continue to keep records to show that these regulations do not apply or they would need to be able to show compliance with any applicable regulation. Since s. NR 440.285 WAC is an allowed New Source Performance Standard (NSPS) under the Registration Operation Permit (ROP), the facility could comply with the NSPS instead of keeping records to show it is exempt without affecting its eligibility under the ROP.

NR 664 Subchapter AA Standards

Subchapter AA standards apply to air emissions from process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction or air or steam stripping operations that manage hazardous wastes with organic concentrations of at least 10 parts per million weight (ppmw). Brenntag does not have any equipment subject to subchapter AA standards.

NR 664 Subchapter BB Standards

Subchapter BB standards apply to air emissions from equipment that contains or contacts hazardous waste with organic concentrations of at least 10 percent by weight. There are specific monitoring and reporting requirements

based on the type of equipment. However applicable equipment that contains or contacts hazardous waste for less than 300 hours per calendar year is excluded from the inspection and monitoring requirements of these standards. Brenntag does not have any equipment subject to subchapter BB standards.

NR 664 Subchapter CC Standards

Subchapter CC standards apply to air emissions from tanks, surface impoundments and containers that manage hazardous wastes containing an average organic concentration of greater than or equal to 500 ppmw at the point of waste origination. Containers of hazardous wastes that are transferred through the facility that are still in the course of transportation are exempt from subchapter CC. Specific exemptions to these requirements are outlined in NR 664 subchapter CC WAC.

Containers typically received and managed at this facility include, but not limited to 5 gallon, 15 gallon, 30 gallon, 55 gallon and 250 gallon containers. These containers typically meet applicable DOT specifications and/or authorizations. Containers greater than 26 gallons that are managing site generated hazardous waste are visually inspected upon their initial filling and within one year if the container is not completely emptied of its contents. Containers less than or equal 121 gallons are acceptable for use in accordance with Level 1 controls. Containers greater than 121 gallons are acceptable for use in accordance with Level 2 controls. Hazardous waste containers less than 26 gallons in capacity or hazardous waste in a vacuum truck are exempt under subchapter CC. Stabilization of waste in containers does not occur at the facility.

Traffic Information

The Brenntag facility is located in an industrial park, which can only be accessed from Lilly Road. Trucks would typically travel on U.S. Highway 45 and exit on Silver Spring Drive traveling west. Lilly Road is approximately 3.5 miles west of U.S. Highway 45. From Silver Spring they would travel north on Lilly Road approximately 0.5 miles to Bobolink Avenue.

Waste arrives at the Brenntag facility in bulk shipments delivered by tanker trucks and in containers (typically 55-gallon drums) which are delivered by enclosed box trailers. The maximum weight of a vehicle and the waste is 80,000 pounds (40 tons). The site is accessed from Bobolink Avenue, which is only accessible from Lilly Road. According to the Village of Menomonee Falls Engineering Department, there are no weight restrictions on these roads. Entrance into the plant is normally immediate and is almost exclusively from the east direction on Bobolink Avenue since west on Bobolink Avenue is a dead end. Exit from the plant requires crossing a traffic lane; however, since the facility is located within an industrial park, exposure to public traffic is minimal.

Service Area

Brenntag handles waste materials from a wide variety of customers in Wisconsin, Michigan, Iowa, Indiana, Nebraska, Minnesota, and Illinois. These customers include manufacturers of various goods, auto/vehicle repair facilities, paint manufacturers, coating manufacturers and companies that coat various products related to packaging. Customers include the following: paint manufacturers, can coating companies, automobile dealerships, auto repair facilities, label and screening companies, container manufacturers, semi-trailer manufacturers, plastics companies (molded), metal finishing operations and various manufacturers involved in the automotive field

On-Site Hazardous Waste Generation

Wastes generated by Brenntag's operations include production activities, empty containers, laboratory wastes, absorbents, contaminated PPE, clean-up wastes and spills of wastes.

FPOR Licensing History 1990

An interim license was issued to Milwaukee Solvents and Chemicals Corporation on January 12, 1983, for a hazardous waste storage facility. On January 31, 1984, a variance to the interim license was issued to allow

Milwaukee Solvents and Chemicals Corporation to store 600 55-gallon drums of hazardous waste. This variance was renewed on December 30, 1985, May 24, 1988, and January 30, 1990.

The Department issued a Completeness Determination for the Feasibility Report on January 23, 1986. On May 22, 1986, the Department issued a favorable feasibility determination for the storage of hazardous waste at the Milwaukee Solvents and Chemicals Corporation facility.

The Department received a Plan of Operation from Milwaukee Solvents and Chemicals Corporation on January 12, 1988. In response to the Plan of Operation the Department issued Notice of Incompleteness (NOI) letters dated July 6, 1988, September 21, 1988, November 1, 1988, July 18, 1989, and December 29, 1989. In response to the NOIs the Department received information on August 4, 1988, October 18, 1988, November 28, 1988, November 10, 1989, January 29, 1990, February 28, 1990, March 19, 1990, and November 10, 1989. The Department issued a Completeness Determination for the Plan of Operation on April 12, 1990. The Department approved the FPOR on July 25, 1990, and issued a hazardous waste storage and treatment license on September 28, 1990. EPA issued a federal hazardous waste operating permit on September 28, 1990.

FPOR Relicensing History 2003

The Department received a FPOR from Brenntag dated February 14, 2000. In response to the FPOR the Department issued a NOI letter dated May 22, 2003. In response to the NOI letter, Brenntag submitted a revised FPOR on June 20, 2003. The Department issued a Completeness Determination on July 15, 2003. The Department approved the FPOR on September 24, 2003, and re-issued a hazardous waste storage and treatment license on December 9, 2003. EPA issued a federal hazardous waste operating permit on January 21, 1994.

Past Department Hazardous Wastes Decisions

Since the original FPOR approval was issued, a number of approvals, determinations and modifications have been issued to the facility. The dates and a summary of the approvals, determinations and modifications are listed in table 2.

Table 2: Past Department Hazardous Waste Decisions

Date of Decision	Description of Decision
January 12, 1983	Interim license determination.
January 31, 1984	Variance for container storage capacity.
November 5, 1984	Variance amendment for an increased in container storage capacity.
December 30, 1985	Variance renewal request approval.
May 22, 1986	Feasibility report determination.
August 1, 1986	Scope of work plan approval.
April 22, 1988	Approval for a phase 1 report.
May 24, 1988	Variance extension approval.
August 25, 1989	Amended plan approval for remedial measures
January 30, 1990	Variance extension approval.
July 25, 1990	Plan of operation and closure plan approval.
September 28, 1990	Initial tank storage license.
January 10, 1991	Variance extension approval.
April 1, 1991	FPOR modification for a soil and groundwater sampling plan.
March 31, 1992	FPOR modification for well construction.
April 21, 1992	FPOR modification for north lot remediation.
January 26, 1993	Modification determination on revised waste analysis plan.
February 17, 1993	Modification covering the quarterly groundwater sampling program.
March 26, 1993	FPOR for groundwater sampling and interim remedial measures.
June 15, 1993	Modification of FPOR for container storage and tank #75.
December 23, 1993	FPOR modification for groundwater monitoring.
August 2, 1994	Modification incorporates state lead corrective action.
January 5, 1996	Partial closure of the former North Lot container storage unit.
September 26, 1996	Approval regarding fuel blending energy recovery standards.
October 12, 1998	Stormwater beneficial reuse recycling exemption determination.

June 27, 2000	Modification for work plan regarding supplemental soil investigation in the area of the proposed building addition.
July 17, 2001	Class 1 plan modification for name change.
January 2, 2002	Modification of a work plan regarding soil investigation at solid waste management unit F.
September 24, 2003	FPOR approval.
October 27, 2006	Temporary authorization request for fuel blending.
May 8, 2007	Re-issuance of the temporary authorization request for fuel blending.
September 5, 2007	Class 2 plan modification for fuel blending.

Past Environmental Analysis

An analysis of the need for an environmental impact statement (EIS) was performed by the Department as part of the initial facility hazardous waste licensing on September 28, 1990. The analysis of the expected impacts of the proposal for the initial facility concluded that it was not a major action that would significantly affect the quality of the environment. As such, an environmental impact statement was not required for the initial license issuance for the current facility. This document updates the original EA completed on April 9, 1986, and confirms an EIS is not needed.

Closure

Brenntag expects to operate the facility for the foreseeable future. The FPOR includes a detailed closure plan and cost estimates for completing closure for the hazardous waste units at the facility. The closure plan includes the cost estimates of the money needed to remove the maximum allowable quantity of hazardous waste stored at the facility and decontamination procedures for all of the surfaces and equipment in the container storage and treatment areas. The 2013 cost estimate to close and decontaminate the hazardous waste facility covered by this determination is \$80,313.36, which includes a 20% contingency.

Corrective Action

Brenntag has historically managed a wide range of chemical products, which over early years of operation has resulted in soil and groundwater contamination at the facility. These releases were initially documented in the following submittals:

- a. Site Investigation Report, prepared by RMT, Inc. dated March 28, 1985.
- b. Environmental Assessment Report, prepared by Hydro-Search, Inc. dated December 17, 1986.
- c. RCRA Facility Assessment, prepared by Department dated March 5, 1987.
- d. Final Phase I Report, Remedial Investigation, prepared by Hatcher Incorporated dated September 25, 1987
- e. Phase II Remedial Investigation Report, prepared by Hatcher-Sayre, Inc. dated December 9, 1988.
- f. Phase III Remedial Investigation Report, prepared by Hatcher-Sayre, Inc. dated September 14, 1989.
- g. Facility Investigation Report, prepared by Hatcher-Sayre, Inc. dated March 30, 1995.

Due to soil and groundwater contamination, Brenntag is required to have a Corrective Action Plan (CAP) in the FPOR. Brenntag's CAP of April 13, 2013, was prepared by Brenntag's current consultant, Arcadis.

The 1986 Resource Conservation and Recovery Act (RCRA) Preliminary Assessment and site investigations conducted in the mid-1990s, showed that 97% (by weight) of the hazardous waste brought to the North Lot for reclamation had the following waste codes: D001, F001, F002, F003 and F005. A subsequent 1987 RCRA Facility Assessment (RFA) indicated that the types of wastes accepted for reclamation included non-halogenated and halogenated organic solvents. Typical wastes included acetone, ethanol, methanol, xylenes, methyl ethyl ketone, toluene, trichloroethene (TCE) and 1,1,1-trichloroethane.

While there were a number of constituents detected, a limited number of constituents were detected at high concentrations: acetone, toluene, methyl ethyl ketone, and methyl isobutyl ketone. Non-chlorinated hydrocarbons were detected at higher concentrations than chlorinated hydrocarbons. Semi-volatile organics and metals were generally detected at low concentrations.

As part of the investigations, approximately 228 soil borings (excluding borings advanced to install monitoring wells), five test pits, and 62 groundwater monitoring wells have been installed at the facility and at offsite locations. Since 1993, groundwater samples have been collected on a quarterly basis from the monitoring well network in accordance with a Department approved groundwater monitoring program. Additionally, groundwater samples have been collected from the property periodically since 1987. Groundwater samples are also collected from the network of nine former water supply wells located on the property and surrounding properties.

The historical activities (filling and cleaning tanker trucks, operating solvent reclamation units, and utilizing aboveground storage tanks) that occurred in these areas resulted in the creation of 12 Solid Waste Management Units (SWMUs). These 12 SWMUs consist of:

South Lot:

SWMU A comprises the area formerly occupied by the facility's solvent reclamation unit and feed tanks. A LUWA Model No. L-300 thin film evaporator was installed in this area in 1974. The evaporator was used to reclaim solvents. Feedstock was pumped to the evaporator from two ASTs located to the north. The tanks had capacities of 1,300 and 2,600 gallons. Reclaimed solvent was transferred to containers or tankers. Still bottoms were containerized and disposed of off-site. The evaporator and ASTs were located on a concrete pad. The system was relocated to the North Lot in 1981. This area was subsequently used for parking and storage until 2000. An addition to the building was constructed over a portion of this area in 2000.

SWMU B comprises an area formerly used for the storage of drums, trailers, and tankers. Unused and reclaimed solvent and chemical products were stored in this area. The storage area was paved with concrete. The exact dates when this area was used for storage is unknown. This area is currently unoccupied.

SWMU C comprises an area that had been previously utilized to wash over-the-road tankers. A solvent/water solution was used to clean the tankers. The tankers were staged on a concrete pad, and washed by facility personnel using pressure washers. The cleaning solution was drained from the tankers and was collected in an oil/water separator. The aqueous fraction of the waste stream was discharged to the drainage ditch along the south property boundary. This practice was discontinued in September 1984, and the cleaning operations were moved to an area to the east, which comprises SWMU D. The area comprising SWMU C is currently unoccupied.

SWMU D comprises the area that was used to wash tankers after operations at SWMU C were discontinued. The washing process in this area utilized a solution of Gamma-Jet solvent and water. The washing was completed on a concrete pad that sloped to a belowground sump. Rinsate was recycled in the system until it became fully spent. The spent solution was then collected and transported to the recovery unit on the North Lot. Cleaning operations in this area were conducted from 1984 to the late 1980s. This area is currently unoccupied.

SWMU E comprises an area around a loading rack associated with a railroad spur that enters the property from a rail line along the south property boundary. Rail tank cars would be staged on the spur. Bulk product was transferred between the rail cars on the spur and the former South Lot tank farm. A concrete pad was located along the spur. This area was removed from service in 2002, when a new spur and tank farm was constructed to the west. The area comprising SWMU E is currently unoccupied.

SWMU F consisted of three operational areas: the former tank farm, a tanker loading area (located to the north of the tank farm), and a drumming facility (located west of the tank farm). The tank farm was constructed in the 1960s, and operated until July 2001. Following decommissioning and removal of the tanks and equipment in the area, several phases of investigation were completed. As discussed in a later section, 2,800 tons of impacted soil was excavated from SWMU F in 2009 for off-site disposal. The area was redeveloped in 2010, and is currently occupied by a reconstructed railroad spur, a storage canopy, and parking.

North Lot:

SWMU G consists of two former outdoor drum storage areas located on the North Lot. One storage area was located south of the reclamation area, and the second storage area was located east of the former tanker/truck area. Both areas were paved with concrete, but were not constructed with secondary containment. After the tank farm was reconstructed in 1990, outdoor drum storage was limited to the area east of the unloading area, and then ceased. This area, which currently consists of a covered storage area, is designated as SWMU G. The other container storage area was not designated in historical figures as a SWMU; however, investigation activities have included this area based on its historical use.

SWMU H is an area west of SWMU G that was used to stage tankers and trucks for loading and unloading. This area was formerly paved with gravel, and is currently paved with concrete and asphalt. This area is currently used to park semi-trailers and tankers. Loading and unloading activities are generally conducted further north, closer to the tank farm and reclamation area.

SWMU I consisted of the solvent reclamation area located along the north property boundary, west of the tank farm. The reclamation area previously consisted of a LUWA thin film evaporator, which was decommissioned and removed along with the closure of the tank farm in July of 2014. Portions of the area were paved, with some areas unpaved. This area was reconstructed in 1990 during upgrades to the tank farm. The entire decommissioned reclamation area is currently paved with concrete and surrounded by asphalt berms.

SWMU J consists of a former drain pipe that extended from a sump located adjacent to the reclamation area. The drain pipe extended southward to a grassy area south of the tanker/truck area and the drainage ditch along the north side of Bobolink Avenue. South of the tanker/truck area, the drain pipe consisted of a 2-inch diameter slotted plastic pipe in a trench. The purpose of the sump and drain pipe was to convey accumulated stormwater away from the reclamation area. The sump and pipe were removed from service in April 1985. The area associated with the section of pipe and trench formerly located south of the tanker/truck loading/unloading area is designated as SWMU J. The northern portion of the pipe and the associated sump are located in other SWMUs.

SWMU K is the original tank farm, which consisted of a diked area approximately 60 feet by 120 feet in size. Approximately one-third of the area had a concrete base, while the remainder consisted of a gravel base. The tank farm has eleven ASTs for storage of hazardous waste (39,000 gallons of capacity) and six tanks for storage of product (72,500 gallons of capacity). Hazardous waste was transferred from tankers and containers to the hazardous waste feed tanks. The hazardous waste was then processed through the reclamation equipment, and reclaimed solvent was transferred to either 55-gallon drums or the product tanks. The tank area was reconstructed in 1990 in a reduced area within the north end of the footprint of the former tank area. The tanks were removed, a concrete base and concrete secondary containment was constructed, and fifteen tanks were installed. The footprint of the former tank area encompasses the current tank area. The licensed hazardous waste tanks have now been closed and removed from the facility.

SWMU L consists of the network of drainage ditches along the perimeter of the facility. Facility operations were not conducted within the ditches. However, storm water and discharges entered the ditches from the facility's operations. According to facility personnel, the locations of the drainage ditches have not been altered.

Seven of the SWMUs (SWMUs A, B, C, D, E, F, and G) consist of areas where historical facility operations were conducted. The remaining areas (SWMUs H, I, J, K, and L) are occupied by current operations or adjacent drainage features. Investigation activities have been conducted at all of the SWMUs. The most recent phases of investigation were completed in 2005 in the South Lot (SWMUs A, B, C, D, E) and at SWMU L. Supplemental investigation was completed at SWMU F in 2007 through 2009 to develop the remedy for this area.

Past investigation and remediation activities have focused on the South Lot. As a result, it is anticipated that corrective action activities during the next license period will focus on the North Lot. In addition, the site-wide groundwater monitoring program will continue, and will be used to evaluate trends in groundwater quality on both the North Lot and South Lot.

SWMUs G, H, I, J and K are located in the North Lot. A work plan for investigation and interim action activities was submitted to Department in March 2011. A response to WDNR comments was submitted in January of 2015. The following present an overview of the anticipated investigation and remediation activities during the next license period. The specific elements of the work plan may change based on Department's comments and investigative findings.

Proposed investigation:

1. A total of 50 (50) Geoprobe® borings will be advanced during the investigation. Based on previous investigations conducted at the facility and the location of the groundwater table, each boring will be advanced to a depth of approximately 12 feet below ground surface (ft. bgs.).
2. Companion sampling will be completed by collecting two aliquots of soil from each sampling interval and placing each aliquot into a separate resealable plastic bag. One of the companion samples from each interval will be used for field screening for the presence of total ionizable VOC vapors with a calibrated photo ionization detector (PID). The screening samples will be warmed and the headspace PID reading of the soil taken by inserting the probe end of the PID into the plastic bag through the seal. The screened samples will be discarded; the unscreened companion samples will be used for preparing samples for analytical testing.
3. Soil samples will be logged in the field to describe the condition and engineering properties of the soil.
4. Soil samples will be collected for laboratory analysis from all 50 (50) Geoprobe® borings. The soil samples will be collected and submitted for laboratory analysis of VOCs, 1,4-dioxane, and tetrahydrofuran. A sample will also be collected for dry weight analysis. The samples will be analyzed using U.S. EPA Method 8260B.
5. A subset of 13 Geoprobe® soil borings will be converted to temporary wells. Each well will consist of a 5-foot length of 1-inch diameter Schedule 40 polyvinyl chloride (PVC) well screen and a 1-inch diameter Schedule 40 PVC riser.
6. Groundwater samples will be collected from the 13 temporary wells. Following purging, groundwater samples will be collected and submitted for laboratory analysis of VOCs, 1,4-dioxane, and tetrahydrofuran. The samples will be analyzed using U.S. EPA Method 8260B.
7. A network of five monitoring wells will be installed. The well locations will be based on a review of the groundwater analytical results from the temporary wells, and ability for a hollow stem auger rig to access the locations.
8. Initially, a single round of groundwater samples will be collected from the monitoring wells. The groundwater samples will be collected and submitted for laboratory analysis of VOCs, 1,4-dioxane, tetrahydrofuran, and 2-butoxyethanol. The samples will be analyzed using U.S. EPA Method 8260B.
9. After the temporary and monitoring wells are installed, a licensed land surveyor will survey the locations of the wells.
10. Following receipt of the soil and groundwater analytical results, ARCADIS will prepare a report. The report will present the investigation results and recommendations incorporating a subset of the new monitoring wells into the current site-wide groundwater monitoring program and for remediation based on the investigation results.

Active soil remediation has not been conducted in the North Lot due to the presence of active facility operations and infrastructure. During construction of the current tank farm in 1990, Vapor Extraction System (VES) piping was installed beneath the footprint of SWMU K. The system consists of five horizontal wells, running east-west beneath the tank farm. The wells consist of 6-inch diameter perforated corrugated pipe, installed within a gravel bed. The wells are connected to a header pipe located along the east side of the tank farm.

To facilitate remediation in this area, the March 2011 investigation work plan included a scope of work to use the existing VES piping as part of an interim action to remediate shallow soil at SWMU K in conjunction with the soil and groundwater investigation.

A mobile trailer will be delivered to the site and connected to the existing piping system. The system will be activated following completion of the soil and groundwater investigation, so a baseline for soil and groundwater conditions is established. Based on ARCADIS' experience, a VES reaches a limit of effectiveness relatively quickly. Since the intention is to use VES as an interim measure, it is anticipated that the system would run until an asymptotic rate of VOC recovery is reached and additional remediation measures are conducted. For planning purposes, it is assumed the VES will operate for up to 2 years.

Groundwater samples are collected from the existing monitoring well network on a quarterly basis. The monitoring program was modified in 2006 to provide data from remediation activities at SWMUs A, B, C, D and E. Since new monitoring wells will be installed and remediation activities will shift to the North Lot, modifications to the monitoring program will be proposed after completion of the investigation at SWMUs G, H, I, J and K. The existing groundwater monitoring program will continue until the Department approves modifications to the monitoring program.

Proposed remediation activities:

1. Implementation of investigation activities at SWMUs G, H, I, J and K in accordance with the March 2011 work plan.
2. Implementation of Vapor Extraction System (VES) in the North Lot as an interim measure, in accordance with the March 2011 work plan.
3. Continuation of the quarterly groundwater monitoring program.

The current cost estimate for corrective action from 2013 to 2022 is \$929,050.

Needs Analysis

Facilities like Brenntag provide the necessary services for other businesses that generate hazardous waste solvents. Solvents are used by facilities to manufacture coatings, adhesives, degreasing/cleaning agents, dyes, polymers, plastics, textiles, printing inks, agricultural products and pharmaceuticals. In 2013, Wisconsin industries generated about 74,855 tons of waste solvents (F001 – F005). Facilities like Brenntag are therefore critical to properly manage waste solvents and keep the solvents out of the environment as improperly managed solvents can pose a very real health risk to people when soils and groundwater are impacted. Most of the waste solvents managed by Brenntag or either used as a secondary fuel source, thereby reducing the quantity of other fuels required and minimizing waste disposal, or sent off-site for solvent recovery.

Exposure to solvents can cause cancers, tumors and impair the functions of the central nervous system. Solvent neurotoxicity symptoms can be characterized by fatigue, memory impairment, irritability, difficulty in concentrating, mild mood disturbance, sustained personality or mood change and impairment in intellectual function, global deterioration in intellectual and memory functions (dementia). Exposure to solvents typically occurs through inhalation, ingestion and dermal contact.

Brenntag provides generators with an efficient and economical means to manage their waste solvents in an environmentally sound manner. Alternatives for managing these waste solvents would include having the individual generators recycle their own waste solvents on-site or shipping the waste solvents to an out-of-state TSD facility for handling. Wisconsin and federal law forbids land filling of any hazardous waste solvents that have not been treated to the regulatory standards identified in ch. NR 668, WAC.

The elimination of Brenntag's storage and treatment license would force many facilities in Wisconsin to explore out-of-state options that would likely be more costly. Facilities like Brenntag are therefore critical for properly managing hazardous waste and keeping hazardous wastes out of the environment as improperly managed hazardous waste can pose a very real health risk to people when soils and groundwater are impacted.

Owner Financial Responsibility

The 2013 cost estimate for the final closure of Brenntag's hazardous waste storage and treatment area is \$80,313.36. The closure cost estimate must be adjusted annually for inflation. Brenntag is required to maintain on file with the Department adequate proof of financial responsibility to cover the cost of closure. Currently Brenntag has on file a letter of credit for proof of financial responsibility needed for closure. Brenntag must also maintain a pollution liability insurance policy for sudden environmental releases of at least \$1,000,000 per occurrence and \$2,000,000 annual aggregate.

FINDINGS OF FACT

The Department finds that:

1. Brenntag Great Lakes, LLC (Brenntag) own and operates a hazardous waste container and treatment facility at N59 W14706 Bobolink Avenue, Village of Butler, Wisconsin.
2. Milwaukee Solvents and Chemicals Corporation (Milsolv) filed a notice of hazardous waste activity on July 14, 1980, with the Department. An EPA, RCRA, Part A, Hazardous Waste Permit Application was filed on February 9, 1982, with EPA. A subsequent notification was filed with the Department on January 3, 1983.
3. An interim license was issued to Milsolv on January 12, 1983, for a hazardous waste storage facility. On January 31, 1984, a variance to the interim license was issued to allow Milsolv to store 600 fifty-five gallon drums of hazardous waste. This variance was renewed on December 30, 1985, May 24, 1988, and January 30, 1990.
4. On April 9, 1986, the Department issued a finalized environmental assessment, which recommended an environmental impact statement would not need to be prepared.
5. The Department issued a Completeness Determination for the Feasibility Report to Milsolv on January 23, 1986. On May 22, 1986, the Department issued a favorable feasibility determination for the storage of hazardous waste at to Milsolv.
6. The Department received a Plan of Operation from to Milsolv on January 12, 1988. In response to the Plan of Operation the Department issued Notice of Incompleteness (NOI) letters dated July 6, 1988, September 21, 1988, November 1, 1988, July 18, 1989 and December 29, 1989. In response to the NOIs the Department received information on August 4, 1988, October 18, 1988, November 28, 1988, November 10, 1989, January 29, 1990, February 28, 1990, March 19, 1990 and November 10, 1989. The Department issued a Completeness Determination for the Plan of Operation on April 12, 1990. The Department approved the FPOR on July 25, 1990 and issued a hazardous waste storage and treatment license on September 28, 1990. EPA issued a federal hazardous waste operating permit on September 28, 1990.
7. On June 30, 1998, Milsolv was purchased by Brenntag. Brenntag changed the Milsolv name to Brenntag Great Lakes, LLC on July 23, 2001.
8. The Department received a FPOR from Brenntag dated February 14, 2000. In response to the FPOR the Department issued a NOI letter dated May 22, 2003. In response to the NOI letter, Brenntag submitted a revised FPOR on June 20, 2003. The Department issued a Completeness Determination on July 15, 2003. The Department approved the FPOR on September 24, 2003, and re-issued a hazardous waste storage and treatment license on December 9, 2003. EPA issued a federal hazardous waste operating permit on January 21, 1994.
9. Releases of hazardous wastes from SWMU at Brenntag are documented in Arcadis' April 13, 2013, report entitled '*Corrective Action Plan*'. The Arcadis' report references the following historic documents.
 - a. Site Investigation Report, prepared by RMT, Inc. dated March 28, 1985.
 - b. Environmental Assessment Report, prepared by Hydro-Search, Inc. dated December 17, 1986.
 - c. RCRA Facility Assessment, prepared by Department dated March 5, 1987.
 - d. Final Phase I Report, Remedial Investigation, prepared by Hatcher Incorporated dated September 25, 1987
 - e. Phase II Remedial Investigation Report, prepared by Hatcher-Sayre, Inc. dated December 9, 1988.
 - f. Phase III Remedial Investigation Report, prepared by Hatcher-Sayre, Inc. dated September 14, 1989.
 - g. Facility Investigation Report, prepared by Hatcher-Sayre, Inc. dated March 30, 1995.

10. On May 31, 2012, the Department issued a call-in letter to Brenntag requiring them to either pursue relicensing by submitting FPOR or notify the Department of its intent to close the facility.
11. On June 7, 2013, the Department received a FPOR from Brenntag dated June 6, 2013, for the relicensing of the hazardous waste container treatment facility. On August 26, 2013, the Department received the required amount of \$8,000 for the plan review fees. The Department received additional information for the FPOR dated June 27, 2013 and September 10, 2013.
12. On July 25, 2013, a class 1 public notice was placed in the Wisconsin State Journal and the Menomonee Falls Now. The class 1 public notice was to inform the public that Brenntag has submitted a FPOR.
13. On October 24, 2013, the Department issued a NOI to Brenntag for the FPOR dated, June 6, 2013. On March 14, 2014, the Department received a submittals dated March 14, 2014. The submittal was in regard to the missing items identified in the October 24, 2013, NOI.
14. On November 20, 2014, the Department issued a closure determination of the hazardous waste tank farm.
15. Additional information used by the Department in connection with the June 6, 2013, FPOR:
 - a. The Department received a letter dated June 3, 2014, from Jeff Noll of Spectrum Engineering Inc., regarding the storage and 10-day transfer designation of the process room.
 - b. The Department received information on the closure of the hazardous waste tank farm:
 - i. An email dated August 8, 2014, from Jeff Noll of Spectrum Engineering Inc., regarding a summary of the analytical results of the rinsates.
 - ii. A closure report dated October 15, 2014, entitled "*Hazardous waste Storage Tanks and Ancillary Equipment Partial Closure*". The closure report was prepared by Brenntag's consultant, Spectrum Engineering Incorporated. The closure report described the closure activities for the hazardous waste tank farm.
 - c. The Department received an email dated August 20, 2014, from Spectrum Engineering Inc., regarding revisions to the storage and 10-day transfer room.
 - d. On October 10, 2014, the Department sent an email to Judy Ninke of Brenntag requesting several areas of clarification on information in the FPOR. The Departments received the following information:
 - i. An email dated October 10, 2014 from Judy Ninke of Brenntag.
 - ii. An email dated November 19, 2014, from Jeff Noll of Spectrum Engineering Inc.,
 - e. The Department received revisions to drawing G-5 by email from Jeff Noll of Spectrum Engineering Inc., dated November 5, 2014, and November 20, 2104.
16. The Department's Environmental Analysis (EA) decision showed that there are no special ethnic or cultural groups in the immediate area nor are there highly sensitive facilities (e.g., schools, hospitals, elder care facilities, child day care) in the immediate area that could be impaired by an air release or a spill from the facility. The EA also showed that the facility is not located in an environmental justice area.
17. On February 23, 2015, the Department determined the FPOR to be complete.
18. On January 26, 2015, the preliminary determination was submitted to Brenntag for comment. The Department received comments back from consultant, Spectrum Engineering Incorporated on February 10, 2015, which are included in this preliminary determination.
19. On February 26, 2015, a class 1 public notice was published in the Wisconsin State Journal and the Menomonee Falls Now, a radio advertisement for the opportunity for public comment was placed with radio station WISN 1130 on the same date during morning and evening drive times, and public notice was placed on the Department's website at <http://dnr.wi.gov/topic/Waste/Comment.html> that informed the public that the

FPOR, the preliminary determination, the initial environmental assessment, the preliminary notice of the reaffirmation of the initial environmental assessment dated April 9, 1986 and the fact sheet are available for review by the public. The 45-day public comment period ends on April 13, 2015.

20. The Department did not receive any public comments from the February 26, 2015, class 1 public notice that was published in the Wisconsin State Journal and the Menomonee Falls NOW.

CONCLUSIONS OF LAW

The Department concludes that:

1. The Department promulgated chs. NR 660 through 670, WAC, establishing minimum requirements for hazardous waste management under the authority of chs. 289 and 291, Wis. Stats.
2. The Department has the authority to conditionally approve a FPOR if the conditions are necessary to ensure compliance with chs. NR 660 through 670, WAC, pursuant to s. 289.30(6), Wis. Stats.
3. Pursuant to s. 289.31, Wis. Stats., and s. NR 670.050, WAC, the Department may issue annual renewals of hazardous waste operating licenses for an effective period of up to ten (10) years. If the licensee chooses to operate or maintain a hazardous waste facility after the ten (10) year effective period ends, the licensee must submit, at least 180 days before the end of the effective period, a new operating license application consisting of a Part A application form, the feasibility and plan of operation report and any supplemental information, as specified in s. NR 670.010(1), (3) and (8), WAC and the applicable sections of chs. NR 660 to 670, WAC.
4. The Department promulgated ch. NR 103, WAC to preserve and protect the water quality of wetlands.
5. Pursuant to s. 289.30(6), Wis. Stats., and ch. NR 670, WAC, the Department has the authority to issue hazardous waste facility plan approvals.
6. The conditions of approval set forth below are necessary to ensure compliance with chs. NR 660 through 670, WAC.
7. Section 291.37 Wis. Stats. and NR 664, Subch. F, WAC authorizes the Department to require corrective action when a release has occurred from a solid waste management unit at a facility.

DETERMINATION

In accordance with s. 289.28(3), Wis. Stats., the Department has determined that there is a need for the facility to store hazardous waste as approved. The Department has further determined that there is no need for an environmental impact report or environmental impact statement for this facility at this time, pursuant to s. 1.11, Wis. Stats., and ch. NR 150, WAC, and that the existing facility conforms to wetlands water quality standards pursuant to ch. NR 103, WAC.

Based on the Findings of Fact and Conclusions of Law, the Department hereby approves the hazardous waste feasibility and plan of operation report for Brenntag Great Lakes, LLC (Brenntag) submitted on June 6, 2013, and amended on March 14, 2014, subject to compliance with ch. 291, Stats., chs. NR 660 through NR 670, WAC, and the following conditions.

CONDITIONS OF APPROVAL

Brenntag Great Lakes, LLC (Brenntag) is subject to the following conditions:

General Conditions

1. The hazardous waste facility shall be operated in accordance with the approved Feasibility and Plan of Operation Report (FPOR), the requirements of ch. 291, Wis. Stats., chs. NR 660 to 670, WAC, and the conditions of this approval. The approval conditions, Wisconsin Statutes or the Wisconsin Administrative Code shall take precedence over any discrepancies with the FPOR.
2. All prior hazardous waste approvals and hazardous waste modifications issued by the Department relating to the operation of the hazardous waste facility at Brenntag are hereby nullified or superseded by this approval except for decisions related to corrective action.
3. The Department retains the jurisdiction either to require the submittal of additional information or to modify this approval at any time if, in the Department's opinion, conditions warrant further modifications. Nothing in this conditional approval shall relieve Brenntag of the legal obligation to comply with applicable federal, state and local approvals.
4. The requirements set out in s. NR 670.030, WAC, apply to this facility and are hereby incorporated by reference and made a part of this approval and of any operating licenses which may be issued for the facility based upon this approval.
5. Brenntag shall at all times maintain in good working order and operate efficiently all facilities and systems of treatment or control and related appurtenances which are installed or used to achieve compliance with the terms and conditions of the license. Proper operation and maintenance includes, but is not limited to, effective performance based on preventive maintenance, adequate funding, effective management, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures.
6. The licenses for operating the hazardous waste units at Brenntag are subject to the annual renewal of operating license fees listed in Appendix II, ch. NR 670, WAC.
7. Brenntag shall comply with all applicable requirements of the Department's air pollution control rules stated in chs. NR 400 to 499, WAC, and directives including but not limited to obtaining all necessary permits to operate in accordance with these rules. Brenntag shall notify the Department of any change in operation that results in an increase in the maximum potential emissions of an air contaminant or which results in the emission of an air contaminant not previously emitted.
8. If at any time Brenntag becomes aware that there was a failure to disclose relevant facts in any reports, plans, or other documents submitted, or that incorrect information was submitted, Brenntag shall promptly submit such facts or correct information to the Department.
9. Brenntag shall install and maintain a bonding and grounding system in all areas of the facility where a static discharge could result in a fire or explosion that would impact the license storage and treatment areas.
10. Brenntag shall operate the facility in a manner that prevents discharges from the facility from impacting the facility and the environment.
11. Should a fire, explosion or other incident that requires implementation of the contingency plan occurs, Brenntag shall do the following:
 - a. Take colored photo documentation of incident.

- b. Identify the employees who have knowledge of, or were involved in the incident.
- c. Retain and secure any data associated with the incident.
- d. Retain and secure any equipment and/or parts that were involved in the incident.
- e. Retain and secure wastes or residues that were involved in the incident.

Brenntag shall obtain Department concurrence prior to releasing any items obtained in 11.c - e.

12. Brenntag shall submit to the Department within thirty (30) days of the date of the final determination (2) two 'clean' printed and bound copies of the FPOR in D ring binders with the spline appropriate labeled.

Storage and Treatment Capacity Conditions

13. Brenntag may not store or treat hazardous in locations or quantities greater than those stated below:

Table 3: Storage and Treatment Summary

Unit Location	Unit Name	Unit Type	License Number	Net Capacity	Units	Container Storage Capacity not to Exceed
Container Storage /10-Day Transfer Building	Container Storage Room - South	Container Storage	6017	Total facility storage capacity not to exceed 55,000	Gallons	1,000 55-gallon drums
	Container Storage Room - North	Container Storage	6017			192 55-gallon drums
Fuel Blending Area	Fuel Blending Area	Container Storage	6017			6,000 gallon tanker limited to 96 hours of storage
	Fuel Blending Area	Container Treatment	4397	18,000 Gallons per day		

Storage Conditions

- 14. All hazardous waste storage activities shall be confined to the areas specified for those purposes in the approved FPOR. The only hazardous wastes that can be stored in these areas are the hazardous wastes identified on the most recent Part A notification form dated June 5, 2013. Wastes with similar characteristics, but different hazardous waste codes, may only be managed at the facility after receiving written approval from the Department following a modification to this determination and the submission of a revised Part A application.
- 15. Brenntag shall maintain their existing agreements with United Sewer & Water, Inc., Volkmann Railroad Builders and the Village of Menomonee Falls in regards to meeting the 50 foot setback requirement for the hazardous waste container storage.
- 16. Waste received from off-site shall be processed or moved into a container storage area within twenty-four (24) hours of the hazardous waste arriving at the facility.
- 17. Brenntag shall sign off on the uniform hazardous waste manifests within seventy-two (72) hours of receipt of the wastes.
- 18. Signs and/or placards shall be used to identify the different types of wastes stored (e.g., ignitables)
- 19. The identity and location of all stored hazardous wastes shall be known throughout the entire storage period.
- 20. When storing non-hazardous waste in the licensed hazardous waste storage units the non-hazardous waste shall be managed as if it were a hazardous waste (e.g., secondary containment, inspection, license storage capacity).
- 21. Sufficient aisle space of at least two (2) feet shall be maintained in all of the storage and staging areas to allow for unobstructed movement of personnel and equipment in an emergency and to allow for inspections of the storage area.
- 22. Sufficient lighting shall be maintained in all of the storage areas to allow for inspections of the storage area.

Transfer Facility Conditions

23. Brenntag may operate an on-site 10-day transfer facility for incoming hazardous waste, provide that Brenntag or its contract carrier is only the transporter and is not identified on line 8 on the uniform hazardous waste manifest as a designated facility.
24. Brenntag shall not move hazardous waste from an on-site hazardous waste transfer facility to the hazardous waste storage facility or from the hazardous waste storage facility to an on-site transfer facility.
25. Brenntag shall clearly mark on all hazardous waste manifests or associated paperwork the date when the hazardous waste is first placed/arrived in the transfer facility. Brenntag shall ensure that on each hazardous waste manifest or associated paperwork this date is available for inspection

Container Conditions

26. Brenntag shall store waste in structurally sound (undamaged) U.S. DOT approved containers.
27. Lines shall be clearly marked and maintained on the floor to delineate the rows of containers from the aisles. Containers shall be stored within the lines that delineate the rows.
28. Containers shall be placed in the storage areas so that labels are visible from the aisles.
29. When storing containers two (2) or more high on pallets, containers of equal or larger size or quantity shall be stored on the bottom level.
30. Brenntag shall stack containers in a stable manner so that the containers do not tip over.
31. Brenntag shall stack containers no more than three (3) containers high.
32. Brenntag shall not stack containers when the stacking would compromise the structural integrity of the container.
33. When containers greater than twenty (20) gallons in size are stored two (2) high, pallets shall be used to separate the first level from the second level.
34. Containers shall be covered/closed except when adding or removing wastes.

Fuel Blending

35. Brenntag shall not treat more than 18,000 gallons of hazardous waste per day and 6,000 gallons of hazardous waste per batch. The amount of hazardous waste processed per day and per batch shall be recorded in the operating record.
36. The fuel blending of hazardous waste shall be conducted only in tanker trucks.
37. The equipment used for fuel blending of hazardous waste shall be located completely within the secondary containment system of the fuel blending area. The equipment used for fuel blending includes, but is not limited to: containers, hoses, pumps, tanker trailer.
38. If for any reason the fuel blending treatment facility is rendered inoperable or is not able to completely process the hazardous waste, Brenntag shall use an approved alternative method for hazardous waste disposal.
39. Brenntag shall use procedures and the best practicable control technology currently available to minimize exposure of hazardous waste to the atmosphere when transferring hazardous waste in and/or out of a container.

40. The secondary containment system shall always – regardless of any precipitation event or weather condition – be able to contain the volume of the largest container currently stored in the fuel blending area.
41. Containers used to supply the material for the fuel blending operation shall only be stored in the fuel blending area during the actual fuel blending operation.
42. The fuel blended hazardous waste in tanker trucks shall be stored for no more than 96 hours in the fuel blending storage area. Brenntag shall record in the operating record the date and time the fuel blending operation ceased on the tanker and the date and time the tanker was shipped off-site.
43. The fuel blending area shall be labeled with the words: “*Hazardous Waste Fuel Blending Area*”.
44. The fuel blending area shall be clearly delineated to show the boundary of the fuel blending area.

Container Repacking/Bulking Conditions

45. When repacking/ depacking is in operation, Brenntag shall at all times equip at least one (1) employee involved in the operation with a two-way radio or other electronic communication device to be used primarily in the event of an emergency.
46. If equipment becomes contaminated after use from repacking/ depacking, Brenntag shall decontaminate the equipment before the equipment is used outside of the repacking/ depacking unit or used with incompatible materials.

Secondary Containment Conditions

47. If precipitation collects in the containment structure, it shall be managed as described in the approved feasibility and plan of operation report.
48. The secondary containment systems shall be operated to prevent any migration of wastes or accumulated liquid out of the system into the air, soil, groundwater or surface water at any time.
49. The secondary containment system shall be capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
50. The secondary containment structures shall be maintained to be liquid tight and free of cracks and gaps.
51. The secondary containment structures shall be promptly resealed or repaired with a chemically resistant material to maintain an impervious surface.
52. All uncontained wastes and liquids located within the secondary containment systems shall be removed from the secondary containment systems area daily and properly managed and disposed of.
53. Brenntag may not store materials or equipment whose volume will adversely affect the secondary containment capacity of the storage units, other than the equipment considered in the secondary containment system calculations included in the FPOR.
54. If a spill occurs in a containment pallet or on the floor, the containment pallet or floor shall be decontaminated before waste or material is stored on the containment pallet or floor.

Repairs/Replacement of the Fuel Blending Area’s Secondary Containment System

55. Within one (1) year after receiving the final determination of the FPOR, Brenntag shall have had a Licensed Professional Engineer review the Fuel Blending secondary containment storage area to make

recommendations for repairs or for replacement of the secondary containment system. Repairs or replacement shall also be completed within one (1) year of Brenntag receiving final determination of the FPOR. Specifically, the secondary containment system shall have a base underlying the containers which is sufficiently impervious and continuous to hold spilled or leaked wastes or accumulated precipitation until it can be removed.

56. Brenntag will be prohibited from using the fuel blending storage area for storage and treatment of hazardous waste if the repairs or replacement of the secondary containment system is not completed within 1-year from the date of receiving the final determination of the FPOR.
57. Brenntag shall do the following in connection with the repair or replacement of the secondary containment system for the fuel blending storage area:
 - a. Brenntag shall notify the Department at least 30 days prior to initiating construction or repairs within the secondary containment system area.
 - b. Within 15 days after completing construction of the repair or replacement, a written statement shall be submitted to the Department certifying that the secondary containment system was constructed in substantial compliance with the approved FPOR or subsequent modification approval.
 - c. Technical data, such as design drawings, design specifications and engineering studies shall be certified by a registered professional engineer.
 - d. Brenntag shall provide as-built drawings to the Department within 15 days after completing construction of the repair or replacement of the secondary containment system.
 - e. Any soil excavated or removed as part of the construction of the secondary containment system shall be properly characterized and managed.

Spill Reporting Conditions

58. Brenntag shall comply with all applicable statutes and rules relating to spills, leaks, or other releases of hazardous waste or other hazardous substances, including ch. 292, Wis. Stats., ch. NR 664 subch. D WAC and chs. NR 700 to 754, WAC.
59. Brenntag shall implement conditions 60 and 61 of this approval when any of the following conditions occur:
 - a. General spills reporting requirement: If a discharged substance has adversely impacted or threatens to adversely impact the air, lands or waters of the state; caused or threatens to cause acute or chronic human health impacts if immediate actions, such as evacuation or in-place sheltering, are not taken; or presents or threatens to present a fire or explosion hazard or other safety hazard, in accordance with Wis. Admin. Code s. 706.05. The discharge notification form can be obtained at the following web address: <http://dnr.wi.gov/files/PDF/forms/4400/4400-225.pdf>.
 - b. Spills occurring inside the buildings: Greater than five (5) gallons of hazardous materials.
 - c. Spills occurring outside the buildings and secondary containment on paved areas that drains to the stormwater collection system: Greater than one (1) gallon of hazardous materials.
 - d. All spills occurring on non-paved areas.
60. Brenntag shall provide immediate telephone notification to the Division of Emergency Government (Spills Line - 800-943-0003) when a release is covered by condition 59.
61. Brenntag shall submit a spill report to the Department in accordance with NR 706. In addition Brenntag shall submit a spill report to the department's designated Hazardous Waste Inspector assigned to Brenntag and to the Department's designated Hazardous Waste plan review staff person assigned to Brenntag and to the Department's designated Spills Coordinator within fifteen (15) days of incident.
62. Brenntag shall submit quarterly reports listing all spills of hazardous material greater than one gallon that occurred at the facility over the previous three (3) months. The report shall include the type and quantity of waste spilled, the location of the release, the source of the release, what actions were taken to clean up the release and what actions will be taken to prevent a release from recurring. The quarterly report shall be

submitted to the Department's designated Hazardous Waste Inspector by the 15th day of April, July, October and January of each year that Brenntag maintains a hazardous waste operating license.

Corrective Action Conditions

63. Brenntag shall determine if additional remediation is necessary in the south lot at locations of: 1) the vicinity of monitor wells MW-123, MW-138, MW-139, 2) the vicinity of monitoring wells along east property boundary (EW-7, MW-140, EW-6) and EW-4), 3) the vicinity of monitoring wells MW-133 and MW-134 on SW corner of South Lot, and 4) wells in the vicinity of the 45,000 ug/l contour (2009) including MW-135 in the sand and gravel, and IW- 4.
 - a. Brenntag shall submit the determination to the Department's project manager by April 30, 2015.
 - b. If additional remediation is necessary, Brenntag shall submit a Remedial Action work plan for groundwater remedial actions by June 30, 2015.
 - c. Brenntag shall implement remediation within 90 days of receiving the Department's determination on the remedial action plan.
 - d. Within 90 days of completing groundwater remediation, Brenntag shall submit a Remedial Action report in compliance with ch. NR 724 WAC and ch. NR 664 subch. F, WAC. The Remedial Action report shall describe the work conducted, and include recommendations for follow-up actions.
64. By April 30, 2015, Brenntag shall provide written response to the Department's comments on the 2011 work plan entitled '*Work Plan for Investigation and Interim Action, SWMUs G, H, I, J and K*'.
65. Brenntag shall update the March 2011 work plan entitled '*Work Plan for Investigation and Interim Action, SWMUs G, H, I, J and K*' by April 30, 2015, if additional investigation or interim actions are necessary.
66. Brenntag shall initiate the investigation work plan for SWMU's G, H, I, J, and K, within 60 days after receiving the Department's determination on the work plan.
67. Brenntag shall submit an investigation report in compliance with ch. NR 724 WAC and ch. NR 664 subch. F, WAC for SWMU's G, H, I, J, and K, within 90 days of completion of the investigation.
68. Brenntag shall submit a Remedial Actions Options Report (RAOR) for SWMU's G, H, I, J, and K, within 60 days of receiving the Department's investigation report determination.
69. Brenntag shall submit a remedial action plan for SWMU's G, H, I, J, and K, within 60 days of receiving comments from Department on the RAOR.
70. Brenntag shall implement remediation at SWMU's G, H, I, J, and K, within 90 days of receiving the Department's determination on the remedial action plan.
71. Brenntag shall have all remedial measures in place and operating by July 1, 2017.
72. By June 30, 2016, Brenntag shall identify additional soil sampling locations (as necessary) that are approvable by the Department project manager in order to:
 - a. Determine the full nature, degree and extent of contamination (if any) caused by the migration of releases from SWMUs G, H, I, J, and K.
 - b. Examine potential migration pathways.
 - c. Examine releases to the lower saturated soil units. This information shall be included on all maps contained in subsequent work plans and investigation reports for, or in the vicinity of SWMUs G, H, I, J, and K
73. Brenntag shall use Incremental Sampling Methodology (ISM) for the characterization of excavated soils, waste materials, and (where applicable) to determine if contaminated media is to be left in place. Information on ISM can be located at <http://www.itrcweb.org/ism-1>

74. The number of samples selected for laboratory analysis from the Geoprobe® soil probes shall include 2 or more samples per boring, as necessary, to determine the vertical extent of contamination. The “50 instrument units” concentration criteria used during soil screening with the PID should not be the sole determination of the number or selection of any particular sample to be analyzed. All evidence of staining or odors shall also be considered. The selection criteria for the laboratory samples to be collected from the hand auger borings that do not exhibit staining shall use a benchmark PID reading of 25 units.
75. Within 90 days of completing a field sampling work plan, Brenntag shall submit a site investigation report in compliance with ch. NR 716.15 WAC and ch. NR 664 subch. F, WAC. The site investigation report shall include recommendations for follow-up actions.
76. Brenntag shall submit semi-annual progress reports of the investigations, interim actions, and remedial actions for SWMUs G, H, I, J and K. The reporting periods for the semi-annual reports are from October 1 to March 31 and April 1 to September 30. The semi-annual reports shall be submitted within 60 days of the end of each reporting period to the Department's project manager and the Department's assigned hazardous waste inspector.

Hazardous Waste Air Emissions NR 664 – Subchapter CC Conditions

77. Brenntag shall visually inspect the potential leak interface areas of each container used to store waste subject to CC for compliance with ch. NR 664 subch. CC, WAC.
78. Brenntag shall maintain in the facility operating record a record of all tests used to comply with the air emissions standards, visual inspections and monitoring, organic vapor determinations, and other documentation demonstrating compliance with ch. NR 664 subch. CC, WAC.
79. Brenntag shall comply with all applicable requirements of any active Department air pollution control permit document, and air management rules contained in chs. NR 400 to 499, WAC, as well as directives including, but not limited to, obtaining all necessary permits to operate in accordance with these rules. Brenntag shall notify the Department's Southeast Region hazardous waste investigator if any proposed changes (through air quality construction permits) to units subject to Subchapter AA, BB, CC, or other RCRA rules pertaining to air emissions.
80. Brenntag shall notify the Department's assigned hazardous waste inspector and hazardous waste permit writer if any proposed changes (through air quality construction permits) affect units subject to ch. NR 664 subch AA, BB, CC, or other RCRA rules pertaining to air emissions.

Waste Analysis Conditions

81. Brenntag shall follow the waste analysis plan as detailed in the FPOR submittal.
82. Brenntag shall retain records of all analytical information, including all calibration and maintenance records of laboratory instrumentation for a period of at least three (3) years from the date the waste was analyzed.
83. Brenntag shall indicate on the hazardous waste manifest, prepared for sending waste off site, all waste codes applicable to the hazardous waste prior to the commingling, recontainerization or bulking of hazardous waste on-site.
84. Brenntag shall follow the sampling collection guidance as outlined in U.S. EPA's SW-846, "*Volume II, Field Manual*". Sampling methods not covered by SW-846 must be acceptable to the Department.
85. Brenntag shall ensure that all samples collected are representative of the waste stream from which the samples are collected.

86. Brenntag shall ensure that the person(s) collecting the samples are trained in proper sample collection.
87. Brenntag shall only combine wastes that are compatible.
88. Brenntag shall use a laboratory that is certified or registered by the State of Wisconsin.
89. Brenntag shall perform a physical and chemical analysis of a waste stream when:
 - a. Brenntag is notified that the process or operation generating the waste has changed.
 - b. Brenntag has reason to believe that the process or operation generating the waste has changed.
 - c. Results of an inspection indicate that the waste to be collected does not match the waste designated.
90. Brenntag shall not modify the random selection process unless Brenntag has obtained Department concurrence.

Manifests Conditions

91. Within forty-five (45) days of receiving a uniform hazardous waste manifest, Brenntag shall send one copy of the uniform hazardous waste manifest information to the Department in an electronic format specified by the Department in accordance with s. NR 664.0071(1)(b)4 Wis. Admin. Code.
92. Upon notification of a uniform hazardous waste manifest data quality issue by the Department, Brenntag, shall within five (5) business days, make the correction(s) and resubmit the uniform hazardous waste manifest information to the Department.
93. Brenntag's submittal of the uniform hazardous waste manifest information shall be identical to the information as describe on the uniform hazardous waste manifest.
94. Beginning in 2014, Brenntag shall begin quarterly, random, checks of five (5) percent of the paper manifests against Brenntag's electronic submittals to the Department for accuracy of the electronic data.
95. Brenntag shall submit quarterly reports of the manifest review. The report shall include the uniform manifest tracking number and the results of the review and what actions, if any, were taken to correct inaccurate data. The quarterly report shall be submitted to the Department's assigned hazardous waste inspector and hazardous waste permit writer by the 15th day of April, July, October and January of each year that Brenntag maintains a hazardous waste operating license or until Brenntag demonstrates there is consistently good agreement between paper manifests and electronic data, then the Department will consider reducing this to an annual requirement covering one (1) percent of the paper manifests.

Closure Conditions

96. Brenntag shall follow the closure plan as submitted in the FPOR when closing all or part of the hazardous waste activities covered by this plan approval.
97. Closure confirmation samples shall be grab samples. Closure confirmation sampling must show that all areas of a unit have been successfully cleaned and that no contamination above the wastewater standards identified in table 1 of s. NR 668.40 Wis. Admin. Code.
98. Field sampling methods shall follow the guidance in EPA's SW-846, "*Volume II, Field Manual*". Field sampling methods not covered by SW-846 must be acceptable to the Department before they are used to close the hazardous waste storage area(s).
99. Sampling methods and equipment, as well as laboratory analytical methods, shall follow the guidance in U.S. EPA's SW-846, "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition*" (see 40 CFR 260.11).

100. Brenntag shall use the lowest possible analytical Method Detection Limit (MDL) for the hazardous constituents associated with listed hazardous wastes.
101. Brenntag shall report all concentration data, even if it is estimated, for compounds or elements that have been positively identified in the sample. Some target analytes are present at concentrations which are above the level that can be reliably detected but below the level that they can be reliably quantified. These data are referred to as “qualified” and will be reported as a number which has been “flagged” by the laboratory. Although less reliable than data which are reported above the Estimated Quantitation Limit (EQL), these qualified data must nevertheless be evaluated carefully by the Department.
102. The closure report shall include a discussion/evaluation of the secondary containment area. This discussion/evaluation of the secondary containment area shall include any observations of visible contamination (i.e., staining caused by waste consisting of light shadows, slight streaks, or minor discolorations), cracks, crevices, and pits in the floor and any defects of the impervious coating used on the floor. Soil sampling will be required if defects are discovered in the secondary containment area that would allow the waste to penetrate the secondary containment area and affect the underlying soils.
103. The closure report shall include a discussion/evaluation of how the cleaning methods and the surfactants chosen are suitable for the contaminants. If detergent washing and water rinsing are selected, the closure report should show that the detergent solution will remove the contaminants of concern. This may be demonstrated with solubility data from product specification sheets or standard chemical tables. The length of time solutions are in contact with the surface and whether or not scrubbing or other physical efforts are used will affect the accuracy of the decontamination demonstration. Other useful considerations might include the temperature of the wash water and the pressure/nozzle that would be used to apply it to clean the surface. The effectiveness of chemical and physical decontamination will also depend on the unit’s design, the cleaning solutions, and the constituents to be removed.
104. The closure report shall include a discussion/evaluation on the equipment used to clean the hazardous waste storage area(s), how this equipment was decontaminated and how the residues from the decontamination were handled.
105. The closure report shall include a discussion/evaluation of how waste materials (i.e., rinsate, debris, disposable equipment, etc.) from decontamination were managed and the volumes / quantity of waste materials that were generated by the decontamination efforts. The waste materials will need to be managed as a hazardous waste per s. NR 664.0178, Wis. Admin. Code.
106. The closure report shall include a drawing of the hazardous waste storage area(s) that are being closed. The drawing should show, at a minimum, dimensions and other construction details, appurtenant structures and relationship to other significant points or structures on the facility property. All drawings shall provide a specified scale, legend, and north arrows.
107. The closure report shall include a discussion on the types and quantities of hazardous wastes and materials that were stored in hazardous waste storage area(s).
108. The closure report shall include a photo log documenting the decontamination of the hazardous waste storage area(s) and photos showing the ‘clean’ hazardous waste storage area(s). Each photo should be numbered, dated and include a description of what was photographed.
109. The closure report shall include a discussion/evaluation of the sampling strategy (i.e., sample collection, sample locations, number of samples collected, how the sample was collected and analytical considerations).
110. The closure report shall include waste disposal documentation (e.g. bills of lading, uniform hazardous waste manifest, waste profile information).

111. The closure report shall include a table summarizing the data reported by the lab. The table needs to include concentration data, even if it is estimated, for compounds or elements that have been positively identified in the sample.
112. The closure report shall include a discussion/evaluation of any spills that have occurred in the hazardous waste storage area(s).
113. Brenntag shall demonstrate that any residual contamination remaining in the hazardous waste storage area(s) is below regulatory or health based standards. To achieve clean closure, Brenntag will need to meet the wastewater standards identified in table 1 of s. NR 668.40 Wis. Admin. Code for the hazardous wastes that were stored in the hazardous waste storage area(s).

Financial Responsibility Conditions

114. Brenntag shall maintain an up to date closure cost estimates and financial proof mechanism covering closure and liability requirements as defined in ch. NR 664, Subch. H, WAC. The owner financial proof mechanism shall be updated annually for inflation.
115. Brenntag shall establish owner financial responsibility for corrective action in accordance with the following schedule:
 - a. Three hundred sixteen thousand, two hundred five dollars (\$316,205) no later than June 1, 2015.
 - b. Six hundred sixteen thousand, two hundred five dollars (\$616,205) no later than June 1, 2016.
 - c. Nine hundred sixteen thousand, two hundred five dollars (\$916,205) no later than June 1, 2017.Brenntag shall maintain this amount, adjusted for inflation, until corrective action activities are completed. All financial responsibility instruments shall be written on forms supplied by the Department with no alterations or edits made to the wording of the forms.
116. Brenntag shall adjust the amount of owner financial responsibility when there are changes to the corrective action activities or the existing financial responsibility for the current corrective action activities is deemed insufficient by the Department.

This approval is based on the information available to the Department as of the date of approval. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity. Likewise, the Department accepts proposals to modify approvals, as provided for in state statutes and administrative codes.

NOTICE OF APPEAL RIGHTS

If you believe you have a right to challenge this decision made by the Department, you should know that Wisconsin statutes, administrative codes and case law establish time periods and requirements for reviewing Department decisions.

To seek judicial review of the Department's decision, sections 227.52 and 227.53, Stats., establish criteria for filing a petition for judicial review. You have 30 days after the decision is mailed or otherwise served by the Department to file your petition with the appropriate circuit court and serve the petition on the Department. The petition shall name the Department of Natural Resources as the respondent.

Dated: April 15, 2015

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
For the Secretary



Edward K Lynch, PE, Chief
Hazardous Waste & Mining Section
Bureau of Waste and Materials Management



Michael J. Ellenbecker, Hazardous Waste Program Coordinator
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