Permit Fact Sheet

General Information

Permit Number:	WI-0000990-10-0
Permittee Name:	McKinley Paper
Address:	540 PROSPECT ST
City/State/Zip:	Combined Locks WI 54113
Discharge Location:	The Combined Locks Mill discharges treated process wastewaters and noncontact cooling waters to the Lower Fox River. The mill is located in the Plum and Kankapot Creeks Watershed (LF 03) in Outagamie County.
Receiving Water:	Lower Fox River located in the Plum and Kankapot Creeks watershed in Outagamie County
Stream Flow ($Q_{7,10}$):	930 cfs
Stream Classification:	Warm Water Sport Fish, Non-Public water supply
Discharge Type:	Existing, continuous

Facility Description

McKinley Paper (formerly Appleton Property Ventures, LLC) is expected to produce an average of 1,355 TPD (tons per day) of paper at its Combined Locks mill. For technology based effluent limitation calculations, the type of paper produced is from non-Integrated Facilities, from Wastepaper Facilities, (b) Corrugating medium furnish subdivision. Current operations include three paper machines, two off-machine calendars, two sheeters and a carton line. The mill purchases all pulp used in its papermaking processes.

The Mill completed miscellaneous changes in 2007 to Paper Machine No. 1 (PM1) that increased the heavy weight paper production capacity of the machine from 324 TPD to 350 TPD. These changes resulted in a small increase in the potential flow rate to the wastewater treatment plant. In 2017, the paper mill changed the grades of paper produced. The McKinley mill now makes “Paperboard From Wastepaper” as defined in NR 284.03 (27), and more specifically the furnish of the paper is categorized as “Corrugating medium furnish subdivision” (NR 284.03 (5)).

The mill operates three power boilers to generate steam for papermaking operations and a 50-megawatt, co-generation turbine. Two of the boilers burn natural gas or #2 fuel oil and the cogeneration turbine burns natural gas. The third boiler burns coal, wood, wastewater treatment system sludge, and fuel paper pellets.

The wastewater plant consists of lift station/bar screen, equalization (surge tank), primary clarification, chemical addition (ammonia and phosphoric acid), pure oxygen (UNOX) activated sludge, and final clarification. Primary and secondary solids are dewatered using belt filter presses with the filtrate returned to the primary clarifiers. The original UNOX activated sludge process had a design flow capacity of 6.5 million gallons per day (MGD) with a design biochemical oxygen demand (BOD) loading of 18,000 lbs/day. A second final clarifier was added in 1993. This addition increased the secondary design flow capacity to 9 MGD. Subsequent modifications included a coating pretreatment process and the replacement of the pulp mill pretreatment tank with an additional activated sludge stage. These improvements increased the plant BOD loading capacity to 32,000 lbs/day. The facility no longer performs coating processes.

Industrial sludge generated at the facility is disposed of at one of two landfills: GFL Hickory Meadows in Hilbert (Calumet County) and Harrison Property Ventures LLC, which is owned and operated by McKinley Paper. Leachate generated from the Harrison Property Ventures LLC landfill is collected and returned to the wastewater treatment facility at McKinley Paper for treatment prior to discharge via outfall 010. Outfall 017 has been updated to represent all sludge generated by the facility and reflect the fact that the facility does not directly land apply the sludge. Outfall 012 has been

renamed to the No. 7 Paper Machine NCCW to reflect the fact that paper machine 7 that previously included coating processes no longer coats paper.

Substantial Compliance Determination

Enforcement During Last Permit: Two notices of noncompliance (NON) were issued on 1/13/2022 and 11/03/2023 for various spills. A Notice of Violation (NOV) was sent to the facility on August 7, 2024 for a floating solids/foam event caused by the facility in the Fox River in March 2024 as well as TSS and Phosphorus exceedances. There was an enforcement conference schedule on September 24, 2024 to discuss how to resolve the permit violations caused by this situation. The facility is still working on submitting items related to this matter.

After a desk top review of all discharge monitoring reports, and a site visit on 04/18/2024 McKinley Paper was found to not be in substantial compliance with their current permit.

Compliance determination entered by Laura Gerold, Senior Wastewater Engineer on 04/18/2024.

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
710	N/A	INTAKE: Lower Fox River cooling water intake structure used for cooling and process water.
007	Daily Maximum of 2.4447 MGD on 9/19/2022; Maximum annual average of 0.6145 MGD year of 2021.	EFFLUENT: Noncontact cooling water from the main mill discharged via outfall 007, which is located on the south bank of the Lower Fox River adjacent to the No. 1 Paper Machine building. Grab samples shall be collected prior to discharge to the Lower Fox River via the outfall.
010	Daily Maximum of 9.546 MGD on 8/5/2019; Maximum annual average of 6.4186 MGD year of 2019.	EFFLUENT: Combined effluent from the primary and secondary treatment systems discharged via outfall 010, which is located in a sampling shed on the south bank of the Fox River adjacent to the Unox clarifier. Composite samples shall be collected prior to discharge to the Lower Fox River via the outfall.
012	Daily Maximum of 4.8509 MGD on 7/20/2022; Maximum annual average of 0.5417 MGD year of 2022.	EFFLUENT: Noncontact cooling water from chilled water system condensers, air compressors, vacuum seal water, and heat exchangers discharged via outfall 012, which is located on the south bank of the Fox River approximately 150 yards upstream of the Combined Locks Dam and at the No. 7 Paper Machine building. Grab samples shall be collected prior to discharge to the Lower Fox River via outfall 012.
017		CAKE SLUDGE: Cake sludge generated by the belt filter presses from the uncoated paper processing and Coated Free Sheet (CFS) process. Sludge disposal is primarily comprised of landfills, either the McKinley owned and operated landfill or another licensed landfill.
103		Field blank to accompany mercury monitoring.

1 Influent – Cooling Water Intake Structure - Proposed Monitoring

Sample Point Number: 710- UNTREATED RIVER IN-TAKE WATER

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Intake Water Used Exclusively For Cooling		Percent	Monthly	Calculated	
Flow Rate		MGD	Monthly	Measure	
Mercury, Total Recoverable		ng/l	Monthly	Grab	

Changes from Previous Permit

Mercury monitoring has been added to this sample point.

Explanation of Limits and Monitoring Requirements

Flow rate and percent of intake water used exclusively for cooling is required to ensure proper surface water intake structure evaluation at the next permit issuance. Mercury has been added to gather more information on the source of mercury in the effluent and because the facility has requested a variance to the mercury limit.

Water Intake Structure: The Influent section includes the water intake structure description, authorization for use, and BTA (Best Technology Available) determination. The permittee is authorized to use the water intake structure which consists of the following:

Location: The McKinley Mill obtains Lower Fox River water at N 44 16' 22" W 88 17' 55" (on the WKID: 4326 DMS datum) along the south bank of the Lower Fox River.

Maximum Through-Screen Design Intake Velocity: The maximum design intake velocity at the bar screen 0.74 feet per second (fps).

Source Waterbody Information:

- 7-Q_{10} = 930 cfs (cubic feet per second)
- 7-Q_2 = 1150 cfs
- 90-Q_{10} = 1317 cfs
- Harmonic Mean Flow = 3040 cfs using a drainage area of 5950 mi^2

General Description: During cooler times of the year, 100% of the cooling water from the intake is re-used for process water. The mill has two cooling water outfalls, 007 and 012. Cooling water outfall 007 services the main mill and the NCCW is returned to the intake during the cooler months and discharged to the river during the warmer months. Cooling water outfall 012 services paper machine 7 and the CFS complex operates in the same way as outfall 007. This upgrade was made in 2017 and was a main factor in reducing the usage of intake water exclusively for NCCW purposes from about 20% annually to about 10% annually. The intake is located at N 44 16' 22" W 88 17' 55" on the Lower Fox River. The intake is a 36" pipe with a 5' x 14' nonmetallic bar screen in front of it that separates into two flow paths. The edge of the intake is flush against the concrete reinforced bank of the river, as in the intake does not extend into the river. The NCCW flow path is drawn by three 10 million gallon per day (MGD) pumps of which one is primarily used, the second is only used for high flow conditions in the warmest months, and the third is a backup. The river water flows through a bar screen and is then pumped into Brassert drum strainers and then piped to NCCW applications. During the warmest months of the year, the high flow that is not recirculated for cooling or used for process water may be returned to the river. During

the cooler months, the NCCW is routed back to the freshwater intake system. The process flow path is through a traveling screen and wet well before reaching the three 10 MGD pumps (the first and second pumps are variable frequency) that pass the water through sand filters. This water is sent into the paper manufacturing process, then to the mill's wastewater treatment facility. The maximum design intake flow is 20 MGD and the though-screen design intake velocity is 1.1 feet per second (fps), however, the mill is typically drawing a third or two-thirds the design velocity by only operating one or two of the pumps at a rate of 18.875 MGD. Based on the maximum design intake volume, the intake draws 46.4 cubic feet per second (cfs), however, the actual withdrawal rate is one third the rate for warmer months of the year and two-thirds that rate for cooler months of the year.

Major Components: 5' x 14' nonmetallic bar screen followed by a 36" pipe followed by a 3/8th inch mesh traveling screen that separates into two flow paths.

- **Maximum Design Intake Flow (DIF)**: 20 MGD because the third pump is strictly a backup pump.
- **Actual Average Intake Flow:** The actual intake flow (DIF) is 1.08 MGD (2.0 cfs)
- A**ctual Intake Velocity:** 0.049 fps at the average intake flow of 1.08 MGD. The facility reported that the Maximum Intake Velocity with all three pumps running at 30 MGD is 1.1 fps. The maximum design intake velocity at 20 MGD is 0.74 fps.
- **Percent Used Exclusively for Cooling:** 10.6%

Percent of intake water used compared to river flow is less than 5% of the mean annual flow: The estimated harmonic mean flow of the Lower Fox River River's is 3040 cfs with a 7Q10 flow of 930 cfs. The design intake flow is 20 MGD = 30.9 cfs, which is equivalent to approximately **1.02**% of the harmonic mean flow and approximately **3.32**% of the 7Q10.

Monitoring for flow rate and intake water used exclusively for cooling: Monitoring flow rate and percent used exclusively for cooling is required to determine applicability with section 316(b) of the Clean Water Act. Intake water is used for noncontact cooling water and then reused as process water.

With the average pump rate of 1.08 MGD and 10.6% of the intake water being used exclusively for cooling purposes, the permittee must meet the requirements of 316(b) of the Clean Water Act on a case by case, best professional basis. If the design intake flow is greater than 2 MGD and if 25% or more of the intake water, based on actual intake flow, is used exclusively for cooling, BTA determinations for entrainment mortality and impingement mortality will be made in accordance with 40 CFR §125.90-98 and the permittee will be required to submit all the required information in 40 CFR §122.21(r). Existing facilities with intake flows less than 2 MGD or less that 25% intake water used exclusively for cooling only need to submit information specified in 40 §CFR 122.21(r)(2), (3), (5), and (8) with their permit reissuance application.

The permittee shall calculate an average daily intake flow rate in MGD (using the flow meter data) monthly and report it electronically on the discharge monitoring form. The permittee shall also calculate and report the percent of intake water used exclusively for cooling. If all cooling water is reused as process water, report the percent intake water used exclusively for cooling as 0%.

BTA determination:

The intake structure is subject to 316(b) of the Clean Water Act and 283.31 (6) Wis. State Statute. The intake structure is not subject to 40 CFR 125 subpart J because less than 25% of the withdrawn water is used exclusively for cooling.

Pursuant to s. 283.31(6), Wis. Stats., Any WPDES discharge permit that limits the discharge of one or more pollutants may require that the location, design, construction, and capacity of the permittee facility's surface water intake structure reflect best technology available (BTA) for minimizing adverse environmental impacts. Section 316(b) of the Clean Water Act (33 U.S.C. 1326(b)) is similar but emphasizes cooling water intakes.

Since McKinley Paper holds a WPDES permit that limits the discharge of several pollutants and withdraws water from the Lower Fox River, a BTA determination is required.

The facility has not demonstrated that it meets any of the eight criteria below. The Department has determined that the facility does not meet BTA for minimizing adverse environmental impact in accordance with the requirements in section 283.31 (6), Wis. Stats. and section 316 (b) of the Clean Water Act. This permit includes a schedule requiring the facility to demonstrate compliance or come into compliance with at least one of the eight criteria below.

Best professional judgment BTA determinations are made using the Department's 2020 *Guidance for Evaluating Intake Structures Using Best Professional Judgment*. For existing intake structures, the guidance advises that intakes deemed BTA should fulfill at least one of the following eight criteria:

1. Each water intake structure has a maximum design intake velocity of *less than* 0.5 feet per second (fps) OR a maximum actual intake velocity of 0.5 fps, demonstrated via measured or calculated values which show the maximum intake velocity as water passes through the intake system, measured perpendicular to the opening, does not exceed 0.5 fps at any point up until the first screen of mesh size 3/8" (or equivalent) or less. (The facility does not meet this because the maximum design intake velocity is 0.74 fps through the bar screen and the maximum design intake velocity is over 0.5 fps through the traveling screen and through the pipe leading to the traveling screen at the design maximum of 20 MGD.)
2. The facility operates a closed-cycle recirculating system that only requires make-up water with > 3 cycles of concentration on at least a daily basis. Cycles of concentration can be measured as the ratio of chloride levels in the recirculated water or blowdown relative to the chloride levels in the source water, or makeup water; or the make-up water volume divided by the blowdown volume (provided there aren't other water losses); or the blowdown water conductivity divided by the make-up water conductivity. (The facility does not meet this criterion; it does not operate a closed-cycle recirculating system)
3. The facility operates an intake structure that minimizes impingement rates by nature of its location (e.g. offshore velocity cap). (The facility does not meet this criterion; it does not operate an intake structure that minimizes impingement rates by nature of its location)
4. The facility employs a system of technologies (e.g. wedge-wire screens, barrier nets; acoustic, light, or pH deterrent systems; variable speed pumps, etc.) that minimize impingement mortality rates. (The facility does not meet this criterion. The facility does employ a pH adjustment system to deter invasive zebra muscles however no study or adjustments have been done at this time to show that it safely deters non-invasive species).
5. The facility operates a modified traveling screen in an optimal manner that does not promote re-impingement or predation of returned organisms. (The facility does not meet this criterion; The facility does not operate a modified traveling screen)
6. The facility's intake withdraws water at > 0.25 fps less than or equal to 16% of the time up until the first screen of mesh size 3/8" (or equivalent) or less. (The facility does not meet this criterion because it does not have a screen of mesh size 3/8" (or equivalent) or less.)
7. There is data indicating that the impingement mortality rate has been/will be reduced 80-95% compared to a once-through cooling system with 3/8" traveling screens; (The facility does not meet this criterion; There is not data that indicates this is true)
8. There is biological data that affirmatively demonstrates that: 1) the source water body does not include threatened or endangered species in the vicinity of the intake, and 2) there are no aquatic life and water quality problems partly or solely due to the presence or operation of the intake structure. (The facility does not meet this criterion because lake sturgeon are found within the waterbody; their proximity to the intake is highly variable and would depend on the time of year and discharge.)

And at least one of the following five criteria:

- **The total water withdrawn (actual intake flow) is ≤ 5% of the mean annual flow of the river on which the intake is located (if on a river or stream) OR the total quantity of the water withdrawn is restricted to a level necessary to maintain the natural thermal stratification or turnover patterns (where present) except in cases where the disruption is beneficial (if on a lake or reservoir) (The facility meets this criteria because**

the facility withdraws approximately 1.02% of the harmonic mean flow and approximately 3.32% of the 7Q10.)

- The facility operates at < 8% capacity utilization rate (with pumps turned off or, if variable frequency drives exist, down substantially during periods of non-operation) or at full capacity only for portions of days during a few months or less on an annual basis. If located in a spawning area, the period of water intake operation should not correspond with times when spawning, peak egg/larval abundance, or larval recruitment is occurring (depending on species present, usually between April – October). (The facility does not operate at < 8% capacity utilization rate or at full capacity only for portions of days during a few months or less on an annual basis).
- The facility operates a closed-cycle recirculating system that only requires make-up water with ≥ 3 cycles of concentration on at least a daily basis. Cycles of concentration can be measured as the ratio of chloride levels in the recirculated water or blowdown relative to the chloride levels in the source water, or makeup water; or the make-up water volume divided by the blowdown volume (provided there aren't other water loses); or the blowdown water conductivity divided by the make-up water conductivity. (The facility doe not operate a closed-cycle recirculating system).
- The facility utilizes other means such as variable speed pumps, unit retirements, etc. to decrease entrainment rates by greater than or equal to 60% compared to a once-through cooling system with 3/8" traveling screens. Flow rate may be used as a surrogate for entrainment rates when determining percent reduction. (The facility does not meet this criterion. The facility minimizes water usage by varying pump rates, however the department does not have information showing that this would reduce the entrainment rates by greater than 60%.)
- There is biological data that affirmatively demonstrates that: 1) the source water body does not include threatened or endangered species in the vicinity of the intake, 2) there are no aquatic life and water quality problems partly or solely due to the presence or operation of the intake structure, and 3) the department biologist concurs that operation of the intake during periods of spawning, peak egg/larval abundance, and larval recruitment will not substantially impact populations or prey bases for the fishery. (The facility does not meet this criteria because lake sturgeon are found within the waterbody; their proximity to the intake is highly variable and would depend on the time of year and discharge. There are no known aquatic life or water quality problems partly or solely due to the presence or operation of the intake structure)

And the following criteria:

- **The facility-wide design intake flow (DIF) for all water intake structures is ≤ 2 MGD (all intake water, cooling and non-cooling, is included in the determination of whether this DIF threshold is met) OR < 25% of the total water withdrawn is used exclusively for cooling purposes (water from a public water system, treated effluents, process water, gray water, wastewater, reclaimed water, or water used in a manufacturing process before or after it is used for cooling is not considered cooling water for the purposes of this determination) (The facility's DIF is 20 MGD, which is greater than the 2 MGD threshold. However the percent used exclusively for cooling is 10.6%.**

Intake Screen Discharges and Removed Substances

Floating debris and accumulated trash collected on any water intake trash rack shall be removed and disposed of in a manner to prevent any pollutant from the material from entering the waters of the State pursuant to s. NR 205.07 (3) (a), Wis. Adm. Code.

Endangered Species Act

This permit does not authorize take of threatened or endangered species. Contact the state Natural Heritage Inventory (NHI) staff with inquiries regarding incidental take of state-listed threatened and endangered species and the US Fish and Wildlife Service with inquiries regarding incidental take of federally-listed threatened and endangered species.

No impingement and entrainment studies of the Mill's fresh water intake pumps have been performed.

2 Inplant - Monitoring and Limitations

Sample Point Number: 103- MERCURY BLANK SAMPLES

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Mercury, Total Recoverable		ng/L	Monthly	Blank	

Changes from Previous Permit:

No changes were made to this sample point from the previous permit issuance.

Explanation of Limits and Monitoring Requirements

The mercury samples require blank samples as part of standard sampling and analysis protocols, and this sample point is where those sample blanks shall be reported.

3 Surface Water - Monitoring and Limitations

Sample Points 009, 011, and 014 have been removed from the permit.

Sample points 009 and 011 have been removed because the department does not permit overflows as outfalls. If an overflow or unplanned, emergency discharge occurs, it shall be reported as described in the standard language section of the permit. Planned overflows or diversions should occur in accordance with the standard language section of the permit also. The virtual combined outfall 014, which was created for data reporting purposes, is no longer applicable because outfalls 009 and 011 have been removed.

Sample point 014 was a virtual outfall where the facility would report the combined the wastewater from 009, 010, and 011. Because there were multiple surface water discharge sample points, the virtual sample point was needed to accurately determine compliance with the WLA, TMDL, and TBEL limits. Because the emergency outfalls have been removed, the only process wastewater that is discharged is discharged through sample point 010. Therefore sample point 010 is the appropriate location to determine compliance with the WLA, TMDL, and TBEL.

Sample Point Numbers: 007- MAIN MILL NCCW; 012- PAPER MACHINE 7 NCCW

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Weekly	Total Daily	
Chlorine, Total Residual	Daily Max	38 ug/L	Monthly	Grab	
Chlorine, Total Residual	Monthly Avg	38 ug/L	Monthly	Grab	
Temperature		deg F	Continuous	Grab	

Changes from Previous Permit

Temperature discharge sample frequency has been changed from “weekly” to “continuous”.

Explanation of Limits and Monitoring Requirements

Because chlorine is added as a disinfectant, a daily maximum limit of 38 µg/L is required, the current Chlorine monthly average limit of 38 µg/L is included to comply with antidegradation requirements per ch. NR 207, Wis. Adm. Code.

Temperature is included so the department can evaluate the need for temperature limits at the next permit issuance.

Sample Point Number: 010- PRIMARY EFFLUENT OUTFALL

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
BOD_5, Total		mg/L	Daily	24-Hr Flow Prop Comp	
BOD_5, Total	Daily Max	13,251 lbs/day	Daily	Calculated	Technology Based Effluent Limit (TBEL).
BOD_5, Total	Monthly Avg	6,734 lbs/day	Daily	Calculated	Technology Based Effluent Limit (TBEL).
Suspended Solids, Total		mg/L	Daily	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	3,013 lbs/day	Daily	Calculated	See TMDL Calculations section.
Suspended Solids, Total	Monthly Avg	1,058 lbs/day	Daily	Calculated	Calculate the average of total monthly mass of TSS discharged and report on the last day of the month on the DMR. See TMDL Calculations permit section.
Mercury, Total Recoverable	Daily Max	11 ng/L	Monthly	Grab	Variance limit.
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Monthly	24-Hr Comp	
pH (Minimum)	Daily Min	4.0 su	Daily	Continuous	
pH (Maximum)	Daily Max	11.0 su	Daily	Continuous	
pH Exceedances Greater Than 60 Minutes	Daily Max	0 Number	Daily	Calculated	See "Continuous pH Monitoring" below for pH limits and allowed excursions
pH Total Exceedance Time Minutes	Monthly Total	446 minutes	Daily	Calculated	

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Phosphorus, Total	Monthly Avg	0.60 mg/L	5/Week	24-Hr Flow Prop Comp	This interim MDV limit is the highest attainable condition (HAC) and is effective upon permit reissuance.
Phosphorus, Total		lbs/yr	Monthly	Calculated	Calculate the 12-month rolling sum of total monthly mass of phosphorus discharged and report on the last day of the month on the DMR. See TMDL permit section.
PFOS		ng/L	Monthly	Grab	
PFOA		ng/L	Monthly	Grab	
Temperature		deg F	5/Week	Grab	
Chronic WET		TU_c	See listed Quarters	24-Hr Comp	
Acute WET		TU_a	See listed Quarters	24-Hr Comp	
Flow River		cfs	Daily	Calculated	Monitoring required May through October only.
WLA Previous 4 Day Avg River Flow		cfs	Daily	Continuous	Monitoring required May through October only.
WLA Previous Day River Temp		Deg F	Daily	Continuous	Monitoring required May through October only.
WLA BOD Value		lbs/day	Daily	Continuous	Monitoring required May through October only.
WLA Adjusted Value		lbs/day	Daily	Continuous	Monitoring required May through October only.
WLA BOD_5 Discharged	Daily Max - Variable	lbs/day	Daily	Continuous	Monitoring required May through October only.
WLA 7 Day Sum Of WLA Values		lbs/day	Daily	Continuous	Monitoring required May through October only.
WLA 7 Day Sum Of BOD_5 Discharged	Daily Max - Variable	lbs/day	Daily	Continuous	Monitoring required May through October only.

Changes from Previous Permit

BOD and TSS limits have been updated based on the updated description of products manufactured with paper machines 1, 6, and 7.

BOD and TSS monitoring and limits have been changed from 5/week to daily due to daily maximum TBEL limits.

PFOS and PFOA monitoring have been added to the permit.

Phosphorus TMDL and WLA limits have been recalculated have been moved to this sample point from the removed Outfall 014.

TSS TMDL and WLA limits have been moved to this sample point from the removed Outfall 014.

Temperature monitoring has been added to the permit.

WLA monitoring and limits have been moved to this sample point from the removed Outfall 014.

Explanation of Water Quality Based Effluent Limits and Monitoring Requirements

Wastewater from PM 1, 6, and 7 is all sent to be treated at the same treatment system and discharged through the same outfall. The daily maximum and monthly average limits are calculated by adding the limits of each machine together. PM 7 is subject to new source performance standards. New source performance standards include annual average limits for non-continuous dischargers, however since this facility is a continuous discharger the annual average limits are not applicable.

Ammonia: there is no reasonable potential for the discharge to exceed any of the calculated ammonia nitrogen limits. No limits are needed, however monitoring is being included for future calculations.

Mercury: If McKinley Paper applies for and is granted a variance approved by US Environmental Protection Agency, in accordance with s. NR 106.145(5), Wis. Adm. Code, an alternative limit for mercury would be set equal to the upper 99th percentile of daily concentrations, or 1-day P99, and would be expressed as a daily maximum. Accordingly, if a variance is granted, the alternative mercury limit would be **11 ng/L, daily maximum**. In conjunction with an alternative limit, the proposed permit shall also include a pollutant minimization program in accordance with s. NR 106.145(6), Wis. Adm. Code.

PFOS and PFOA: The need for PFOS and PFOA monitoring is evaluated in accordance with s. NR 106.98(2), Wis. Adm. Code. Based on the type of discharge and the available PFOS/PFOA monitoring data, PFOS and PFOA monitoring is recommended at a monthly frequency.

pH: The categorical effluent standards for the Corrugating medium furnish subdivision require the pH to be between 6.0 s.u. and 9.0 s.u.. However, as per the WQBEL memo, the effluent pH may vary from the limits specified in accordance with categorical effluent standards, with no excursions greater than 446 minutes per calendar month, no individual excursions greater than 60 minutes, and no individual excursions outside the range of 4.0 – 11.0 s.u.

Phosphorus: This limit should be expressed in a manner consistent with the wasteload allocation and assumptions of the TMDL. If after two permit terms, the Department determines the nonpoint source load allocation has not been substantially reduced, the Department may include the s. NR 217.13 WQBEL unless these reductions are likely to occur. Total phosphorus (TP) effluent limits in lbs/day are calculated as recommended in the *TMDL Development and Implementation Guidance: Integrating the WPDES and Impaired Waters Programs (*April 2020) and are based on the annual phosphorus (WLA) given in pounds per year. With the permit application, McKinley Paper has re-applied for the phosphorus multi-discharger variance (MDV). Conditions of the phosphorus MDV require the facility to comply with an interim phosphorus limit in lieu of meeting the final WQBEL. The recommended interim limit during the 2nd permit under MDV approval, pursuant to s. 283.16 (6) (a), Wis. Stats., is 0.60 mg/L as a monthly average; the DMR data shows that the facility is currently able to meet this limit, therefore no schedule will be included in the permit to reach 0.60 mg/L.

Temperature- monitoring has been added to this outfall to allow calculations to be done to determine reasonable potential to violate thermal limits for the next permit cycle.

Total Suspended Solids: Because McKinley can currently meet the annual WLA with the current daily maximum and monthly average limits, it is not necessary to recalculate the TMDL limits. Therefore, no changes are recommended for the TSS limits in the reissued permit. It is recommended that daily maximum and monthly average limits of 3,013 lbs/day and 1,058 lbs/day be continued in the reissued permit.

Temperature: Based on the available effluent data, no effluent limits are recommended for temperature. The complete thermal table used for the limit calculation is attached. Monitoring is recommended in the reissued permit for all outfalls to determine reasonable potential in the next permit reissuance.

Whole Effluent Toxicity: The Instream Waste Concentration (IWC) to assess chronic test results is 4%. According to the *State of Wisconsin Aquatic Life Toxicity Testing Methods Manual* (s. NR 219.04, Table A, Wis. Adm. Code), chronic testing shall be performed using a dilution series of 100%, 30%, 10%, 3% & 1% and the dilution water used in WET tests conducted on Outfall 010 shall be a grab sample collected from the Fox River. Sampling WET concurrently with any chemical-specific toxic substances is recommended. Tests should be done in rotating quarters, to collect seasonal information about this discharge and should continue after the permit expiration date (until the permit is reissued).

Explanation of Technology Based Effluent Limits (TBEL) and Monitoring Requirements

See the attached TBEL memo for explanation of technology based limits.

4 Cake Sludge Disposal Requirements

Sample Point 016 has been removed from the permit because it is no longer used. Sample point 017 has been updated to clarify that the facility sends all sludge to a licensed landfill rather than land applying the waste.

Sample Point Number: 017- Sludge Sent to Landfill

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Volume		Tons/year	Annual	Measure	
PFOS + PFOA		ng/kg	Annual	Calculated	
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

Changes from Previous Permit:

PFAS, PFOS + PFOA, and Volume has been added to the permit.

Total Solids, Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, pH, Total Phosphorus, Water Extractable Phosphorus, Total Potassium, Dry Weight Aluminum. Dry Weight Calcium, Dry Weight, Iron, Dry Weight, lead, Dry Weight Magnesium, Dry Weight Sodium, Dry Weight Cadmium, Dry Weight Copper, Dry Weight Mercury, Dry Weight Nickle, Dry Weight Zink, Dry Weight PCB, 2,3,7,8-TCDD TE Dioxin, 2,3,7,8-TCDD Dry Weight Dioxin, Cry Weight Furan, 2,3,7,8-TCDF , PAHs, Chloride, Dioxins and Furans, and Priority Pollutant Scan have been removed from this outfall because the facility does not direct land apply cake sludge.

Explanation of Limits and Monitoring Requirements

PFAS and PFOS + PFOA- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA is currently developing a risk assessment to determine future land application rates and expects to release this risk assessment by the end of 2024. In the interim, the department has developed the "Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS". Although McKinley Paper has not historically land applied its cake sludge, land application remains a viable discharge option available to facilities and, as such, regulatory information about those activities should be provided for informational purposes.

Collecting sludge data on PFAS concentrations from a wide range of wastewater treatment facilities will help protect public health from exposure to elevated levels of PFAS and determine the department's implementation of EPA's recommendations. To quantitate this risk, PFAS sampling has been included in the proposed WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

5 Schedules

5.1 Industrial Intake Structure Evaluation

The permittee shall upgrade the surface water intake structure to meet BTA for impingement mortality.

Required Action	Due Date
Action Plan: The facility shall review all options to comply with BTA (Best Technology Available) requirements for impingement mortality. The facility shall submit a plan to the department for review and approval that describes actions the facility has determined to be the most appropriate to achieve the BTA requirements for impingement mortality. The plan shall include at least two feasible options in the event that the first option is not achievable. The facility shall commence implementation of the plan as soon as possible after department approval.	07/01/2026
Update Report: The facility shall submit a report describing the actions taken thus far and any additional planned actions that still need to be completed to achieve compliance with the BTA for impingement mortality requirements, including a detailed timeline for completion	07/01/2027
Summary Report: The facility shall submit a report describing the implementation/installation of the chosen option to comply with the BTA requirements for impingement mortality. If the chosen option included construction and/or equipment upgrades and additional time is needed to complete additional construction steps, the facility shall identify the remaining steps and provide completion dates for each step.	07/01/2028
Complete Actions: The facility shall complete all actions necessary to achieve compliance with the BTA for impingement mortality requirements.	07/01/2029

5.2 Industrial Sludge Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Industrial Sludge Management Plan: Submit an update to the management plan to explain and optimize the industrial sludge system and demonstrate compliance with ch. NR 214, Wis. Adm. Code, requirements. This plan shall include a detailed description of the treatment processes that generate industrial sludge, the characteristics and related data of the industrial sludge, current and potential disposal methods, and applicable contract haulers utilized for sludge transport. If the facility decides to start land applying waste, the facility is required to complete an updated Landspreading Management Plan (LMP) in accordance with s. NR 214.18(6)(c), Wis. Adm. Code,	07/01/2027

and submit it for by the department prior to commencement of landspreading sludge.	

5.3 Mercury Pollutant Minimization Program

As a condition of the variance to the water quality based effluent limitation(s) for mercury granted in accordance with s. NR 106.145(6), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
Annual Mercury Progress Reports: Submit an annual mercury progress report related to the pollutant minimization activities for the previous year. The annual mercury progress report shall: Indicate which mercury pollutant minimization activities or activities outlined in the Pollutant Minimization Program Plan have been implemented and state which, if any, activities from the Pollutant Minimization Program Plan were not pursued and why; Include an assessment of whether each implemented pollutant minimization activity appears to be effective or ineffective at reducing pollutant discharge concentrations and identify actions planned for the upcoming year; Identification of barriers that have limited program effectiveness and adjustments to the program that will be implemented during the next year to help address these barriers; Include an analysis of trends in total effluent mercury concentrations based on mercury sampling; and Include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury. The first annual mercury progress report is to be submitted by the Due Date.	10/01/2025
Annual Mercury Progress Report #2: Submit a mercury progress report, related to the pollutant minimization activities for the previous year, as defined above.	10/01/2026
Annual Mercury Progress Report #3: Submit a mercury progress report, related to the pollutant minimization activities for the previous year, as defined above.	10/01/2027
Annual Mercury Progress Report #4: Submit a mercury progress report, related to the pollutant minimization activities for the previous year, as defined above.	10/01/2028
Final Mercury Report: Submit a final report documenting the success in reducing mercury concentrations in the effluent, as well as the anticipated future reduction in mercury sources and mercury effluent concentrations. The report shall: Summarize mercury pollutant minimization activities that have been implemented during the current permit term and state which, if any, activities from the Pollutant Minimization Program Plan were not pursued and why; Include an assessment of which pollutant minimization activities appear to have been effective or ineffective. Evaluate any needed changes to the pollutant reduction strategy accordingly; Identification of barriers that have limited program effectiveness and adjustments to the program that will be implemented during the next variance term (if applicable) to help address these barriers; Include an analysis of trends in mercury concentrations based on sampling and data during the current permit term; and Include an analysis of how influent and effluent mercury varies with time and with significant	10/01/2029

loadings of mercury. If the permittee intends to reapply for a mercury variance per s. NR 106.145, Wis. Adm. Code, for the reissued permit, a detailed Pollutant Minimization Program Plan outlining the pollutant minimization activities proposed for the upcoming permit term shall be submitted along with the final report. An updated pollutant minimization plan shall: Include an explanation of why or how each pollutant minimization activity will result in reduced discharge of the target pollutant; Evaluate any new available information on pollutant sources, timing, and concentration to update the mass balance assumptions and expected sources of the pollutant, and Identify any information needs that would help to better determine pollutant sources and make plans to collect that information.	
Annual Mercury Reports After Permit Expiration: In the event that this permit is not reissued by the date the permit expires, the permittee shall continue to submit annual mercury reports for the previous year following the due date of Annual Mercury Progress Reports listed above. Annual Mercury Progress reports shall include the information as defined above.	

5.4 Phosphorus Schedule - Continued Optimization

The permittee is required to optimize performance to control phosphorus discharges per the following schedule.

Required Action	Due Date
Optimization: The permittee shall continue to implement the optimization plan as previously approved to optimize performance to control phosphorus discharges. Submit a progress report on optimizing removal of phosphorus by the Due Date.	10/01/2025
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	10/01/2026
Progress Report #3: Submit a progress report on optimizing removal of phosphorus.	10/01/2027
Progress Report #4: Submit a progress report on optimizing removal of phosphorus.	10/01/2028
Progress Report #5: Submit a progress report on optimizing removal of phosphorus.	10/01/2029

5.5 Phosphorus Payment per Pound to County

The permittee is required to make annual payments for phosphorus reductions to the participating county or counties in accordance with s. 283.16(8), Wis. Stats, and the following schedule. The price per pound will be set at the time of permit reissuance and will apply for the duration of the permit.

Required Action	Due Date
Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(lbs of phosphorus discharged minus the permittee's target value) times ($64.75 per pound (To be recalculated in the spring of 2025 prior to reissuance of the permit)] or $640,000, whichever is less. See the payment calculation steps in the Surface Water section. The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was	03/01/2026

made. The first payment verification form is due by the specified Due Date. Note: The applicable Target Value is the TMDL derived limit value as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is $50.00 adjusted for CPI.	
Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2027
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2028
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2029
Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2030
Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.	
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

5.6 PFOS/PFOA Minimization Plan Determination of Need

Required Action	Due Date
Report on Effluent Discharge: Submit a report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations. This analysis should also include a comparison to the applicable narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.	07/01/2026
Report on Effluent Discharge and Evaluation of Need: Submit a final report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations of data collected over the last 24 months. The report shall also provide a comparison on the likelihood of the facility needing to develop a PFOS/PFOA minimization plan. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results. The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan. If the Department determines a PFOS/PFOA minimization plan is needed based on a reasonable potential evaluation, the permittee will be required to develop a minimization plan for Department approval no later than 90 days after written notification was sent from the Department. The Department will modify or revoke and reissue the permit to include PFOS/PFOA minimization plan reporting requirements along with a schedule of compliance to meet WQBELs. Effluent monitoring of PFOS and PFOA shall continue as specified in the permit until the modified permit is issued. If, however, the Department determines there is no reasonable potential for the facility to discharge	07/01/2027

PFOS or PFOA above the narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code, no further action is required and effluent monitoring of PFOS and PFOA shall continue as specified in the permit.	

Explanation of Schedules

Intake structure evaluation

The facility is being required to develop and enact a plan to comply with impingement mortality BTA per the department's *Guidance for Evaluating Intake Structures Using Best Professional Judgment (BPJ)*.

Mercury

The mercury variance process requires that the facility provide the department with updates and steps taken to reduce mercury in the effluent.

Phosphorus Continued Optimization

Per s. 283.16(6)(a), Wis. Stats. the Department may include a requirement that the permittee optimize the performance of a point source in controlling phosphorus discharges, which may be necessary to achieve compliance with multi-discharger variance interim limits. This compliance schedule requires the permittee to continue to implement the optimization plan that was approved during the previous permit term.

Phosphorus MDV County Payment

Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the "Payment to Counties" watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal $ $**64.75 (To be recalculated in the spring of 2025 prior to reissuance of the permit)** per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

PFAS/PFOS

As stated above, NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. S. NR 106.98, Wis. Adm. Code, specifies steps to generate data in order to determine the need for reducing PFOS and PFOA in the discharge. Data generated per the effluent monitoring requirements will be used to determine the need for developing a PFOS/PFOA minimization plan. As part of the schedule, the permittee is required to submit two annual Reports on Effluent Discharge.

If the Department determines that a minimization plan is needed, the permit will be modified or revoked/reissued to include additional requirements.

Special Reporting Requirements

None

Other Comments:

None

Attachments:

Water Quality Based Effluent Limits

Expiration Date:

June 30, 2030

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Jonathan Hill Wastewater Engineer Date: 12/30/2024

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: 11/15/2024

TO: Laura Gerold

FROM: Jonathan Hill – WY/3

SUBJECT: Technology-Based Effluent Limitations for McKinley Paper WPDES Permit No. WI-0000990-09-0

PART 1 – BACKGROUND INFORMATION

McKinley Paper is a paper factory located at the 540 Prospect Street, Combined Locks, WI. McKinley Paper is a non-integrated facility that produces corrugated medium furnish paper products using purchased wastepaper. The McKinley mill currently makes "Paperboard from Wastepaper" as defined in NR 284.03 (27), and more specifically their furnish is classified in s. NR 284.03 (5) Wis. Adm. Code as "Corrugating Medium furnish subdivision".

PART 2 – INDUSTRIAL CATEGORIES

The facility has previously produced a variety of paper products. Currently McKinley Paper makes Corrugating Medium furnish Paperboard From Wastepaper as defined in s. NR 284.03 (5) and NR 284.03 (27) Wis. Adm. Code. The facility uses recycled wastepaper to make corrugating paperboard. These guidelines are based on federal effluent guidelines in 40 CFR Part 430 Subpart K. The permittee must meet the applicable effluent limit guidelines as described in this chapter. These effluent limit guidelines include:

- Effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT), the best available technology economically achievable (BAT), and new source performance standards (NSPS) found in s. NR 284.12, Wis. Adm. Code.

If the calculated limits are less than or equal to the limits in the current permit, then the limits would be set equal to the recalculated limits. If the recalculated limits are less restrictive than the limits from the current permit, they cannot be increased unless the antidegradation and anti-backsliding provisions of ch. NR 207, Wis. Adm. Code, are met.

Section NR 220.13, Wis. Adm. Code, includes provisions that address cases where federal and state rules differ. Section 283.11, Wis. Stats., address compliance with federal standards. In this case, the state rules are consistent with federal rules with a few exceptions. In such cases, the permit will in all cases be based on the state rule notwithstanding the federal regulations. The omissions are described below.

Neither state nor federal rules specify a date for the definition for a new source. Therefore, it is necessary to review available federal guidance. The Boornazian memo (September 28, 2006) specifies a new source date for 40 CFR Part 430 Subparts I – L of November 18, 1982. The Department relies on the Boornazian memo to establish date of applicability for NSPS.

The federal standard rule lists revised BCT standards requirements. All BCT limitations are set to be the

same as the best practicable control technology (BPT) standards. State rules in ch. NR 240, Wis. Adm. Code, do not list standards for BCT.

PART 3 – LEVELS OF CONTROL

PMs 1 and 6 production lines construction commenced prior to November 18, 1982. Therefore, the process wastewater from these lines is subject to BPT, BCT, and BAT. PM 7 production line construction commenced after November 18, 1982. Therefore, the process wastewater from these lines is subject to BPT, BCT, BAT and NSPS. PM7's NSPS lists annual average limits, however the code explains that the annual average limits are only applicable for non-continuous dischargers, therefore the annual average limits are not applicable for PM 7.

PART 4 – PLANNED PRODUCTION LEVELS

The current levels of production for each Subcategory are provided by McKinley Paper Daily average (tons/day) production levels are based on the August 30, 2024 email from McKinley Paper.

Paper Machine	Paper Produced (tons/day)
PM1	260
PM2	485
PM3	610

PART 6 – TBEL CALCULATIONS

BOD and TSS

Paper machines 1 and 6's subcategory has daily maximum and monthly average limits based on s. NR 284.12 Wis. Adm. Code and do not have an annual average requirement in code. Paper machine 7's subcategory in s. NR 284.12 Wis. Adm. Code has daily maximum, monthly average, and annual average limits listed. However, as per s. NR 284.04(3), Wis. Adm. Code, only non-continuous dischargers shall be subject to annual average limitations, therefore annual average limits were not calculated or included in this memo.

Machine 1. Paperboard FWP (b) Corrugating medium furnish subdivision:

Paper Produced (tons/day)	BOD monthly average factor (lbs/tons)	BOD monthly average Limit (lbs/day)	BOD Daily Maximum factor (lbs/tons)	BOD Daily Maximum Limit (lbs/day)	TSS Monthly Average factor (lbs/tons)	TSS Monthly Average Limit (lbs/day)	TSS Daily Maximum factor (lbs/tons)	TSS Daily Maximum Limit (lbs/day)
260	5.6	**1456**	11.4	**2964**	9.2	**2392**	18.4	**4784**

Machine 6. Paperboard FWP (b) Corrugating medium furnish subdivision:

Paper Produced (tons/day)	BOD monthly average factor (lbs/tons)	BOD monthly average Limit (lbs/day)	BOD Daily Maximum factor (lbs/tons)	BOD Daily Maximum Limit (lbs/day)	TSS Monthly Average factor (lbs/tons)	TSS Monthly Average Limit (lbs/day)	TSS Daily Maximum factor (lbs/tons)	TSS Daily Maximum Limit (lbs/day)
485	5.6	**2716**	11.4	**5529**	9.2	**4462**	18.4	**8924**

Machine 7. Paperboard FWP(b) Corrugating medium furnish subdivision:

Paper Produced (tons/day)	BOD monthly average factor (lbs/tons)	BOD monthly average Limit (lbs/day)	BOD Daily Maximum factor (lbs/tons)	BOD Daily Maximum Limit (lbs/day)	TSS Monthly Average factor (lbs/tons)	TSS Monthly Average Limit (lbs/day)	TSS Daily Maximum factor (lbs/tons)	TSS Daily Maximum Limit (lbs/day)
610	4.2	**2562**	7.8	**4758**	4.6	**2806**	8.8	**5368**

Note: Limits are calculated by multiplying the limit factor by the tons of paper produced (example: BOD monthly average limit = 260 tons/day x 5.6 lbs/ton = 1456 lbs/day.

pH:

Any discharge subject to BAT, BPT, BCT, or NSPS limitations or standards in this part must remain within the pH range of 6.0 s.u. to 9.0 s.u.

PART 7 – FINAL CALCULATED LIMITS

Per s. NR 284.04(2), Wis. Adm. Code, facilities subject to effluent limitations in more than one subcategory, the discharge limitations shall be the aggregate of limitations applicable to the total production covered by each subcategory.

Total TBEL Limits:

Machine	BOD (lbs/day)		TSS (lbs/day)	
	Monthly Ave	Daily Max	Monthly Ave	Daily Max
Machine 1	1456	2964	2392	4784
Machine 6	2716	5529	4462	8924
Machine 7	2562	4758	2806	5368