



State of Oregon
Department of
Environmental
Quality

Water Pollution Control Facilities Permit Renewal Fact Sheet Kronospan La Grande

Permittee	Kronospan La Grande LLC 1 Kronospan Way Eastaboga, Alabama 36260
Existing Permit Information	File Number: 9501 Permit Number: 103044 Expiration Date: 12-31-2033
Permittee Contact	Morgan Olson, Plant Manager (541) 962-2100, M.Olson@kronospanusa.com 62621 Hwy 82 Island City, Oregon 97850
Facility Name & Location	Facility Name: Kronospan La Grande Address: 62621 Hwy 82 Island City, Oregon 97850 Lat: 45.2000 Lat: -118.0200 County: Union
LLID:	LLID: 1169845460718
Receiving Stream/Basin:	Nearest stream: Grande Ronde River at mile 150 Sub Basin Name: Upper Grande Ronde WRD Basin Name: Grande Ronde
Proposed Action:	Permit Renewal Application Number: 948442 Date Application Received: September 23, 2022
Source Category:	WPCF Industrial
Sources Covered:	Process Wastewater (Industrial Wastewater Effluent)
Permit Type:	WPCF-IW-B20
Permit Writer	Anna Morgan-Hayes 541-246-4562 Date Prepared: 9-25-2023

WPCF Permit Renewal Fact Sheet Kronospan La Grande

Table of Contents

1. Introduction	1
2. Facility Description.....	2
2.1 Wastewater Facility	2
2.2 Compliance History	8
2.3 Groundwater	8
2.4 Industrial Wastewater Effluent	9
3. Schedule A: Effluent Limit Development.....	10
3.1 Industrial Wastewater Effluent Land Application (Outfall 002)	10
3.2 Groundwater	10
4. Schedule B: Monitoring and Reporting Requirements.....	11
5. Schedule C: Compliance Schedule	11
6. Schedule D: Special Conditions	11
6.1 Operation, Monitoring and Management Plan.....	11
6.2 Emergency Response and Public Notification Plan.....	12
6.3 Groundwater	12
7. Schedule F: WPCF General Conditions	12
8. Next Steps	12
Appendix A: Oregon Water Resources Groundwater Well Identification	13

List of Tables

Table 2-1: List of Outfalls.....	8
----------------------------------	---

List of Figures

Figure 2-1: Kronospan La Grande Site Map.....	5
Figure 2-2: Kronospan La Grande Site Plan.....	6
Figure 1-3: Kronospan La Grande Water Reuse Schematic.....	7

WPCF Permit Renewal Fact Sheet

Kronospan La Grande

1. Introduction

As required by Oregon Administrative Rule 340-045-0037, this fact sheet describes the basis and methodology used in developing the permit. The permit is divided into several sections:

- Schedule A – Waste discharge limitations
- Schedule B – Minimum monitoring and report requirements
- Schedule C – Compliance conditions and schedules
- Schedule D – Special conditions
- Schedule F – General conditions

This permit was transferred from Boise Cascade to Woodgrain Millworks, Inc. on December 10, 2018. A permit renewal application (No. 948442) was received on September 23, 2022, and the permit was administratively extended.

Following DEQ's initial reissuance of this permit on January 29, 2024, the permittee requested a hearing contesting the conditions within the WPCF permit. DEQ and Woodgrain Millworks Inc. engaged in subsequent settlement discussions. During the appeal process, the permittee requested an ownership transfer effective May 22nd, 2024, and signed by both legal contacts from the companies. DEQ received the transfer request on June 18, 2024. The permit and fact sheet have been updated to reflect that the permit has transferred from Woodgrain Millworks, Inc. Island City Particleboard to Kronospan La Grande LLC. As a result of the aforementioned appeal discussions, DEQ is reissuing the permit.

A summary of the major changes to the permit are listed below:

Effluent monitoring of lagoon pH will be required more frequently on a seasonal schedule, to better track and understand pH fluctuations. In lieu of flow monitoring, quarterly monitoring for Calcium (Ca), Iron (Fe), Magnesium (Mg), and Total Phosphorus (P) are required in the Cooling Water Pond to assess impacts to groundwater from the lagoon. Similarly, quarterly monitoring for Manganese (Mn) and Sodium (Na) are required in the ROD Pond to assess impacts to groundwater from the lagoon. During permit renewal, DEQ determined that current monitoring is insufficient to determine adequate groundwater protections. Additionally, the pH limit has been modified in accordance with Division 340-040-0020 so that groundwater is sufficiently protected from potential seepage from the facility's lagoons. The facility will be required to submit an Operations, Maintenance & Management Plan (OM&M) detailing the industrial wastewater effluent land application system should land application of effluent be utilized. Industrial wastewater effluent monitoring, land application, soil, crop monitoring, and groundwater monitoring are required by the permit. Monitoring locations have been specified within the permit.

A compliance schedule has been added to the permit to require that the permittee will conduct a Water Quality Analysis Report (WQAR) to determine groundwater concentration limits.

2. Facility Description

2.1 Wastewater Facility

Kronospan La Grande LLC (Kronospan La Grande) operates a particleboard manufacturing plant on approximately 67 acres on a heavy industrial zoned site adjacent to Highway 84. The plant was constructed in 1967 and includes two production lines with supporting buildings and operational centers. Green and dry furnish (wood fiber) is trucked to the plant from area wood products facilities where it is off-loaded at truck ramps and moved by conveyer and forced air to one of three storage warehouses. The material is kept separate based on wood type and moisture content, with the green furnish being dried in the "green furnish dryer" before being added to the production line.

During production, the stored furnish is transferred to one of two buildings where the moisture content is further adjusted, and urea-formaldehyde (UF) resin or melamine formaldehyde resin is added. The raw product then moves by conveyer to one of two production lines where material is formed and pressed into particleboard sheets. After trimming and finishing, the final product is placed on pallets and prepared for shipping either by truck or rail. Supporting facilities include various storage buildings, administrative offices, a sander dust-fired boiler, a natural gas-fired boiler, a sander dust-fired green furnish dryer, air pollution control equipment, stormwater and wastewater ponds and land application fields.

There are three general categories of wastewater at the site: sanitary wastewater (which is discharged to the local publicly owned treatment works (POTW)), process wastewater, and industrial non-process wastewater. Process wastewater consists of wet electrostatic precipitator (WESP) wastewater, regenerative thermal oxidizer (RTO) wash water, resin tank area cleanup wastewater, laboratory (quality control) wastewater, air compressor condensate, roof wash water, miscellaneous cleanup waters, and blowpipe cleaning wastewater. Non-process wastewater consists of boiler blowdown and associated waters, non-contact cooling water and fire system flush water. Industrial stormwater is also generated across the site. **Industrial wastewater effluent** includes industrial stormwater, industrial wastewater consisting of non-contact cooling water, boiler blowdown, fire system flush water, and process wastewater. Stormwater is commingled with industrial wastewater effluent and routed to the ponds and may be land applied. Evaluation for the need of a separate stormwater permit for stormwater not routed to the wastewater ponds is conducted separately of WPCF permitting actions. The facility does not currently have a 1200-Z permit assignment.

Kronospan La Grande generates approximately 6.4 million gallons (MG) per year of industrial wastewater effluent (OM&M Plan Update, Nov 2022), which contains 3,399 mg/L (range: 2,944 to 6,982 mg/L) TDS, 18.09 mg/L TKN, 0.12 mg/L N02+N03 and 874.3 mg/L (range: 764 to 8,540 mg/L) sodium. All process wastewater, except for laboratory wastewater, is discharged to a two-cell 60-mil, HDPE-lined pond referred to as the Process Water Pond (PWP). Laboratory

wastewater is discharged to the local POTW. Non-process wastewater and stormwater may also be discharged to the PWP. Water stored in the PWP may be irrigated on adjacent land application sites and landscaped areas subject to an approved OM&M Plan.

Table 2. Projected Process Wastewater Volumes⁽¹⁾
Woodgrain Millworks, Inc. - Particleboard Facility, Island City, Oregon
WPCF 103044, OM&M Plan Updated 11/11/22

Wastewater Source	Estimated Flow ⁽²⁾ (gal/month)	Operating Period (months)	Total Volume ⁽³⁾ (gal/yr)
Wet Electrostatic Precipitator	131,760	12	1,581,120
Regenerative Thermal or Catalytic Oxidizer	25,000	12	300,000
Boiler Waters @ 50% of actual discharge	225,000	12	2,700,000
Air Compressor Condensate	2,500	12	30,000
Roof Washwater/Blowpipe Cleaning	150,000	12	1,800,000
Total	534,260		6,411,120

NOTES:
¹ Based on conservative estimates. Does not include exempt process wastewaters (except boiler waters) or stormwater.
² Maximum generation on a monthly basis, from Table 1.
³ Estimated maximum flow. Does not include well water or CWP water, which can be added as needed.

According to the *2021 Operations Summary and 2022 Irrigation and Crop Plan Update* (February 2022), most of the process wastewater generated originates from WESP, which in conjunction with a regenerative thermal oxidizer, is required to remove particulate matter and organic compounds from the green furnish dryer exhaust. WESP wastewater has high sodium concentrations due to drying of green wood and biomass combustion to generate energy, and use of caustic to clean WESP electrodes. The facility plans to continue to use WESP wastewater in the green furnish dryer. Land application of industrial wastewater effluent, which contains WESP wastewater, should only be undertaken if PWP capacity issues occur, or other emergency actions are required. If land application of WESP process wastewater is being considered, a detailed plan must be developed and described in the OM&M to ensure loading rates will not cause significant impacts to soils and groundwater.

Annual data (2019-2022) provided by the facility shows seasonal increases in pH in the Process Water Pond and ROD pond. The facility mitigates high pH levels by adding freshwater from groundwater well (GW LogID: UNIO 641) (Appendix A). High levels are associated with summer algal blooms, however more data may be needed to assess its impact to groundwater. Water from the ROD Pond is routed through a constructed wetland before discharge into an adjacent unlined storage lagoon (Cooling Pond) that has been excavated/constructed with possible hydraulic connection to groundwater. Water from the Cooling Pond is recirculated through the facility's industrial non-contact cooling system or directed to the PWP to augment crop irrigation requirements.

Division 340-040-0020 sets numerical groundwater quality reference and guidance levels. The guidance level for pH in groundwater is 6.5-8.5. Due to the cooling pond discharge and potential connection to groundwater, the effluent pH of the pond is required to meet the groundwater pH standards.

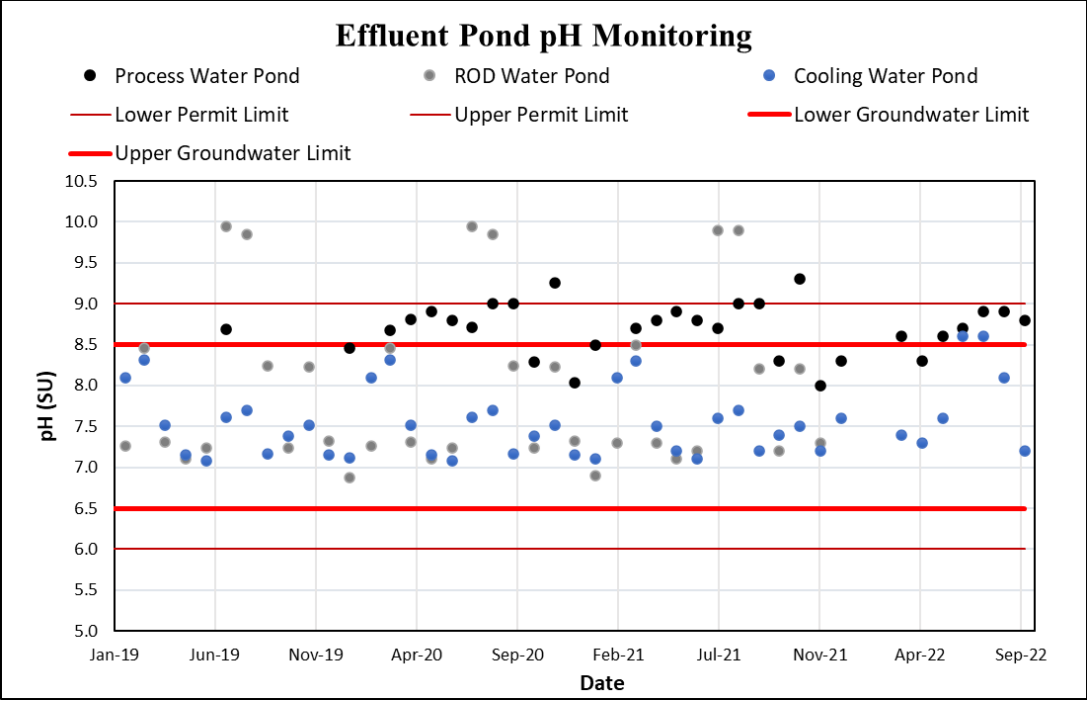


Figure 2-1: Kronospan La Grande Site Map

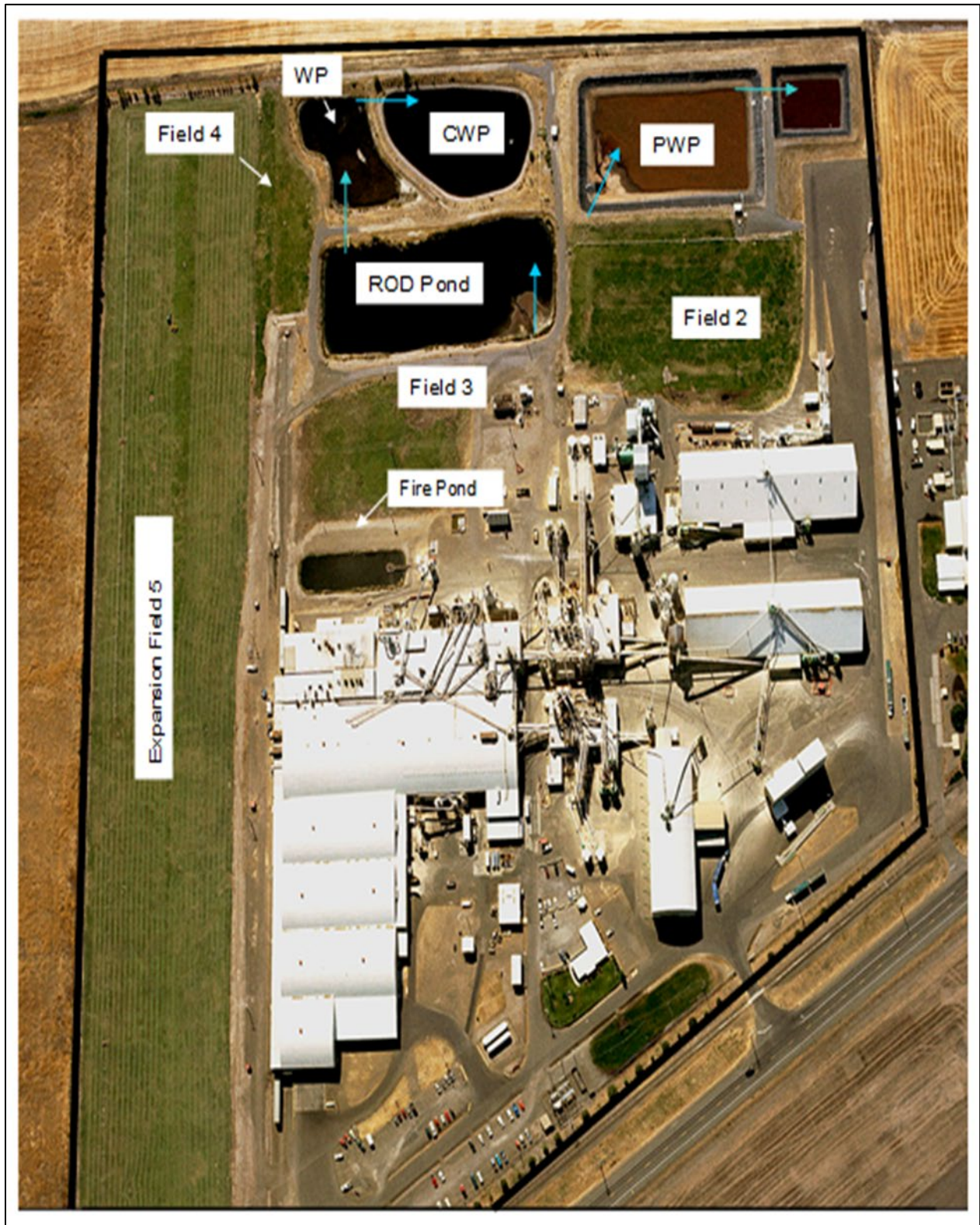


Figure 2-2: Kronospan La Grande Site Plan

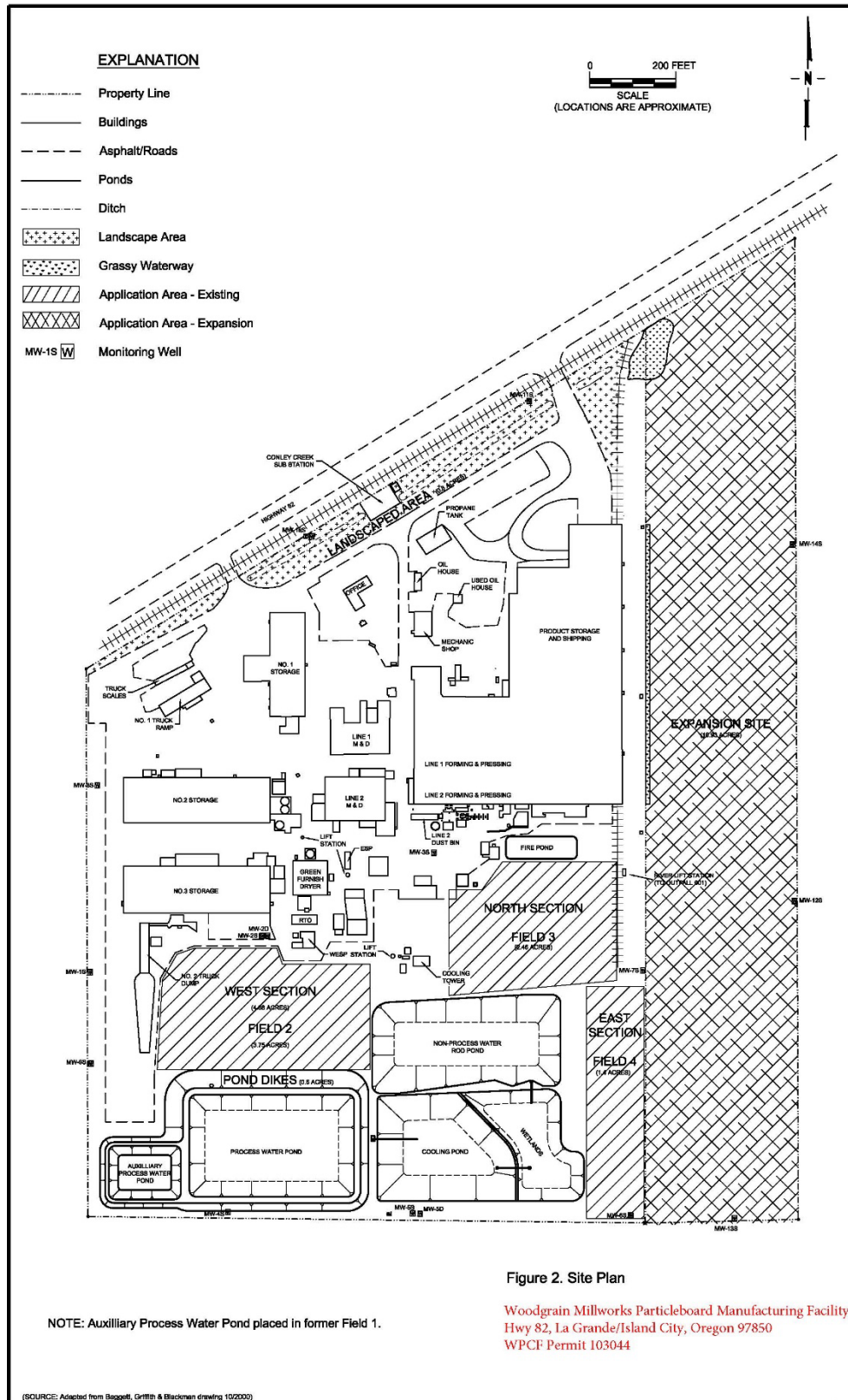


Figure 2-3: Kronospan La Grande Water Reuse Schematic

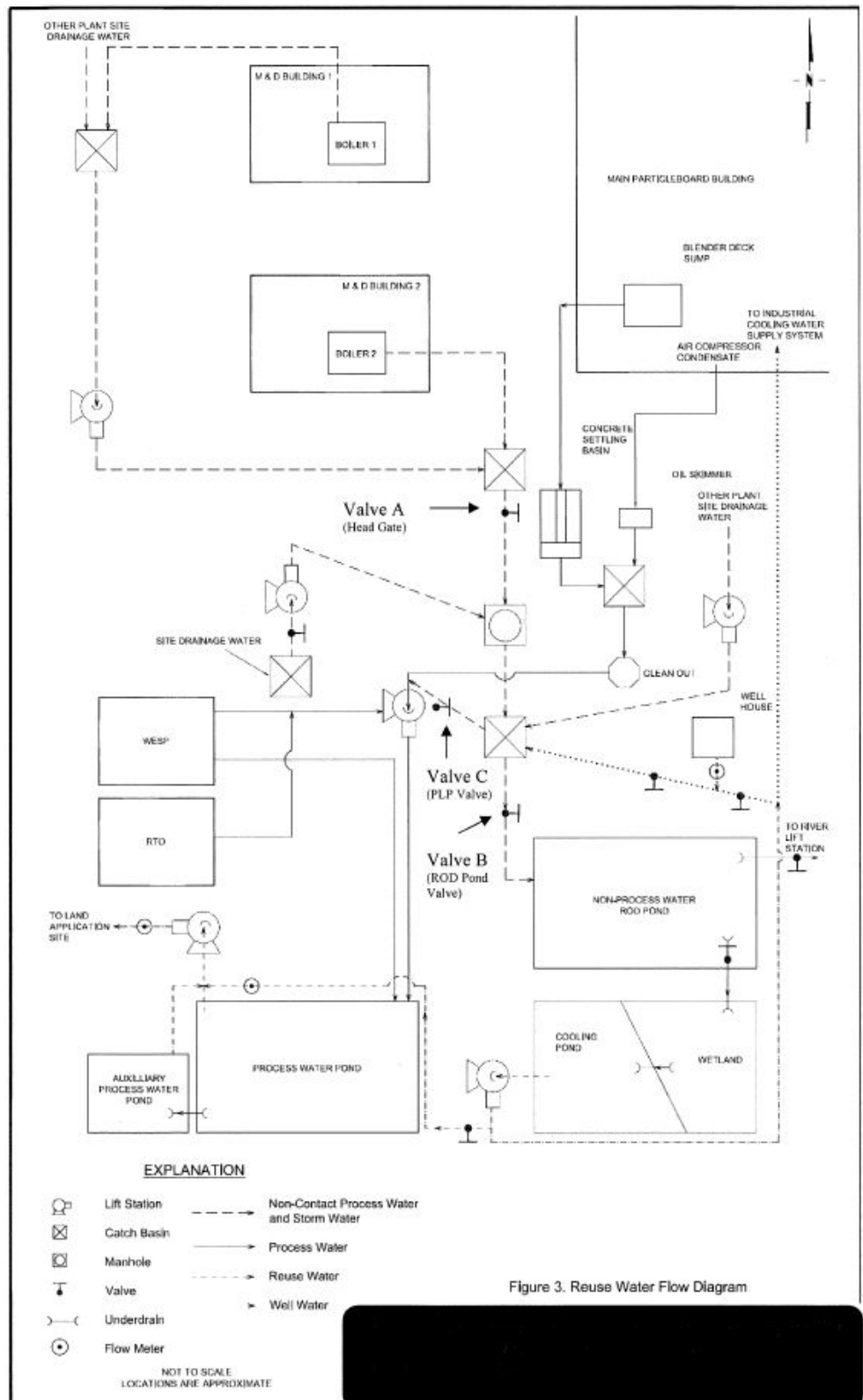


Table 2-1: List of Outfalls

Outfall Number	Type of Waste	Lat/Long	Existing Flow ¹ (mgd)
001	Industrial wastewater effluent	45.3474423, -118.026555	6.4
002	Land Application (Industrial wastewater effluent, stormwater, and freshwater)	Specified in DEQ-approved OM&M Plan	
Notes: 1. Existing Flow = existing average annual flow (OM&M Annual Update, 2022)			

2.2 Compliance History

The permit was previously operated by Boise Cascade, the permit was then transferred on December 10, 2018, to the current operator, Woodgrain Millworks, Inc. The facility was last inspected by DEQ on May 4, 2023, in conjunction with gathering information to support the permit renewal process. The facility was found to be operating in compliance with the terms and conditions of the WPCF permit at that time.

A review of discharge monitoring reports indicates that the permittee has met all existing permit monitoring and reporting requirements to the date of the permit renewal.

Since the last permit renewal in 2013, the facility documented violations and compliance issues that resulted in the issuance of the following enforcement actions:

- May 10th, 2016 – Warning Letter (2016-WL-1553) was issued for failure to always maintain wastewater treatment and control facilities systems, a Class II violation.
- June 13th, 2016 – Warning Letter with Opportunity to Correct (2016-WLOTC-1646) was issued for two violations; violation of leaching prohibition, this was considered a Class II violation, and failure to submit complete DMRs, a Class III violation.
- October 31st, 2019 – Warning Letter (2019-WL-5091) was issued for violation of OM&M plan, permittee discharged process wastewater to a non-process wastewater pond, a Class II violation.

2.3 Groundwater

In a previous permit cycle, Boise was required to submit a Water Quality Analysis Report (WQAR) dated November 26, 2003, with proposed groundwater concentration limits or concentration limit variances. Based on the report, the Department concluded that background concentrations appeared to be increasing and that groundwater appeared to be mounded at the up-gradient property boundary adjacent to Momentive Specialty Chemicals (formerly Hexion Chemical), possibly due to an underground water line leak. Hence, the permittee was asked to

investigate the cause of the mounding and to propose alternative methods to develop groundwater concentration limits or to propose other alternatives to limits.

On July 27, 2005, the permittee notified the Department that a water leak had been discovered in a buried fire suppression water line at the adjacent Hexion Chemical facility. The leak was repaired during the week of November 28, 2005. However, because of the likelihood that the groundwater mound would subside after the leak was repaired, it was determined that the facility should continue groundwater monitoring for a year and then submit an evaluation of the data. The Department received the evaluation on March 20, 2007. Because groundwater conditions continue to be in a state of flux, the Department supported Boise's proposal to continue groundwater monitoring.

According to the facility's OM&M Annual Report (2022), trends in groundwater quality data for downgradient well MW-4, show increasing concentrations of selected constituents. Based on this, continued groundwater monitoring will be required to better assess if concentration increases are related to a previous leak in the PWP (which was repaired in 2015), due to a new leak in the PWP membrane or pressure main, or to off-site and upgradient groundwater impacts.

Additionally, more recent groundwater data shows mounding, however, more refined information is needed to determine the cause. Groundwater typically will mound when moving through finer grained sediments or material with lower hydraulic conductivity, such as those present beneath the pond sites. Due to the presence of shallow groundwater, and the absence of a liner in the ROD pond and wetland, minimal leakage of the pond can contribute to mounding. In addition, several inconsistencies have been found with the facility's groundwater contour maps; therefore, more accurate contour maps will be required as part of a water quality analysis report (WQAR) as a condition of Schedule C of the permit.

2.4 Industrial Wastewater Effluent

Land Application

The land application sites consist of several small areas and total approximately 24.5 acres: 3.75 acres north of the PWP (Field 2), 2.46 acres north of the Retention, Overflow, and Discharge (ROD) Pond (Field 3), and 1.40 acres east of the ROD Pond (Field 4). The Expansion Site includes 16.90 acres along the eastern boundary of the facility (Fields 5N and 5S). The Expansion Site is separated into North and South zones due to the current irrigation infrastructure in place.

Water may be pumped from the PWP via buried pipe and applied to the crops using wheel lines and a limited number of hand lines and water cannons. Currently, the facility is using freshwater (supplemental water) from groundwater well for irrigation (GW LogID: UNIO 641) (Appendix A). The freshwater well source is permitted through Oregon Water Resources Department separate from the WPCF permit.

Landscaped areas that can receive wastewater cover approximately an acre and are located along the northern boundary adjacent to Highway 82. These areas may be irrigated with either potable

municipal water or wastewater through a hand line or drip system. In addition, the facility generates approximately 104 MG per year of non-process wastewater and stormwater.

On an annual average basis, non-process wastewater contains 894 mg/L TDS 2.2 mg/L TKN and 0.1 mg/L N03. Industrial wastewater effluent (boiler blowdown and associated waters, non-contact cooling water and fire system flush water) and stormwater are discharged to the ROD Pond or to the PWP. Dikes and levees around the PWP, ROD and Cooling Pond are sprinkled with non-process water directly from the Cooling Pond to maintain vegetative cover.

3. Schedule A: Effluent Limit Development

No discharge to navigable waters is permitted. All wastewater is stored in lagoons and must be irrigated only on DEQ-approved land application sites in accordance with an OM&M Plan.

All activities concerning industrial wastewater effluent must conform to an OM&M Plan approved by DEQ. Specific crops, application rates and buffers are included in the required OM&M plan. All industrial wastewater effluent must be distributed on land, for dissipation by evapotranspiration and controlled seepage by following sound irrigation practices.

3.1 Industrial Wastewater Effluent Land Application (Outfall 002)

Schedule A of the permit requires the permittee to apply industrial wastewater effluent according to an OM&M Plan. Industrial wastewater effluent is industrial stormwater, industrial wastewater consisting of non-contact cooling water, boiler blowdown, fire system flush water, and process wastewater. Schedule A also restricts the application of industrial wastewater effluent to prevent the following:

- Irrigating above agronomic rates,
- Adverse impact to groundwater,
- Offsite surface runoff or subsurface drainage through drainage tile,
- Creation of odors, fly and mosquito breeding, or other nuisance conditions.

3.2 Groundwater

DEQ may evaluate the need for a full assessment of the facility's impact on groundwater quality if there is any evidence of an adverse impact resulting from the facilities operation or the facility fails to operate in accordance with permit conditions. Schedule A of the proposed permit includes a condition prohibiting adverse impacts to groundwater.

A condition in Schedule C requires the facility to conduct a WQAR. Upon approval of the analysis, this permit will be modified to include final concentration limits.

4. Schedule B: Monitoring and Reporting Requirements

Schedule B of the permit describes the minimum monitoring and reporting necessary to demonstrate compliance with the proposed effluent limits. Detailed monitoring frequency and reporting requirements are in Schedule B of the proposed permit. The required monitoring, reporting and frequency for many of the parameters are based on DEQ's monitoring and reporting matrix guidelines, permit writer judgment, reporting requirements for similar facilities of this type and size and to ensure the needed data is available for the next permit renewal.

The monitoring data provide DEQ with information to evaluate the performance of the industrial facility for influent, the lagoons, and effluent. The authority to require periodic reporting by permittees is found at ORS 468.065(5).

Monitoring requirements for the ROD, Cooling and Process Water Ponds are included in the permit for the permittee to track the proper functioning of the lagoons and monitoring for performance of the treatment system. Additionally, the permittee is required to monitor land applied industrial wastewater effluent, the land application area, supplemental water (freshwater from groundwater well), soil, and crops in accordance with the permit and DEQ-approved OM&M Plan.

Minimum groundwater monitoring requirements are provided as a condition in Schedule B; however, groundwater monitoring must be done in accordance with the Department-approved Groundwater Monitoring Plan.

5. Schedule C: Compliance Schedule

The permittee must complete a WQAR within twelve months of the permit effective date. The WQAR will require the permittee to conduct a review of groundwater data and evaluate appropriate concentration limits. Upon approval of a WQAR, the permit will be modified and/or a condition of approval will be included in the WQAR review to incorporate final groundwater concentration limits in Schedule A.

6. Schedule D: Special Conditions

The proposed permit contains the following special conditions. The conditions include the following:

6.1 Operation, Monitoring and Management Plan

A new permit condition requires the submittal of an Operation, Monitoring and Management (OM&M) plan describing the management for the land application of industrial reuse water and the reuse of process and wastewater solids.

6.2 Emergency Response and Public Notification Plan

The permittee must have an up-to-date spill response plan for prevention and handling of spills and unplanned discharges.

6.3 Groundwater

A condition that requires the permittee update the groundwater monitoring plan when modifications are made. This condition describes well management and the requirements of the groundwater monitoring plan.

7. Schedule F: WPCF General Conditions

This schedule includes conditions and definitions that are applicable to all WPCF permits in Oregon of this type.

8. Next Steps

The Kronospan La Grande facility has submitted a complete WPCF permit application. DEQ will send the draft permit documents to the applicant for review and comment, and then proceed with a Category II permitting action for public notification as per OAR 340-045-0027.

DEQ will respond to comments received during the comment period. All those providing comment will receive a copy of DEQ's response. Interested parties may also request a copy of DEQ's response. Once comments are received and evaluated, DEQ will decide whether to issue the permit as proposed, to make changes to the permit, or to deny the permit. DEQ will notify the permittee of DEQ's decision. If substantive changes are made to the permit, then an additional public notice period may occur. DEQ may also revise this fact sheet or update the fact sheet through memorandum.

Appendix A: Oregon Water Resources Groundwater Well Identification

Oregon Water Resources Department
Groundwater Information System

Groundwater Site: UNIO 641

Site Identification (Click to Collapse...)

GW LogID: [UNIO 641](#) [Well Log Database](#)

GW Well Tag Number: _____

Tag Verified on Well: No

Site Type: WELL

Primary Use: _____

Unused Status: _____

Site Source Organization: _____

Site Source OWRD: _____

Established By: Emily Bray-Nash

Established Date: 03/26/2009

Bonded Company: STOFFEL BROS. DRILLING CO.

Stage: COMPLETE

Location (Click to Collapse...)

Latitude/Longitude

Latitude: 45.34912525 Horiz. Error: 100.00 ft

Longitude: -118.02600723 Datum: WGS1984

Lat/Long Source: WR FINAL PROOF MAP

Location

TRSQQ: WM 2.00S38.00E35SENNW

Tax Map: _____

Taxlot: _____

24 Quad: _____

Basin: 8 - Grande Ronde

County: Union

WM District: 6

WM Region: E

LSD Elev: _____ Accy: _____ Datum: _____

Elev Source: _____

[Groundwater Mapping Tool](#)

☐

☐

Maxar | Oregon Water Resources

Water Rights (Click to Expand...)

Well Construction History (Click to Collapse...)

Well Construction History												
Well Log id	Well Log	Work Type	Startcard	Well Tag	Owner Name	First Water	Max Case. Diam.	Max Case. Depth.	Max Seal Depth.	Max Depth	Completed Depth	Complete Date
UNIO 641	Log	NEW			BOISE CASCADE CORP.						899.00	8/16/1965

Well Log	Aquifer	Aq at Max Depth	System Aquifer	Regional USGS Aquifer	Local USGS Aquifer
UNIO 641					

Well Test

Well Log	Test Type	Yield(gpm)	Drawdown	Duration (hr)	Calculated Specific Capacity (gpm/ft)
UNIO 641	Pump	100.0	21.0	3.0	4.76