



Department of  
Environmental  
Conservation

## State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	<b>3999</b>	NAICS Code:	<b>331221, 332114, 332312</b>	SPDES Number:	<b>NY0312924</b>
Discharge Class (CL):	<b>01</b>	DEC Number:	<b>4-0199-00059</b>		
Toxic Class (TX):	<b>N</b>	Effective Date (EDP):	<b>10/1/2023</b>		
Major-Sub Drainage Basin:	<b>1301</b>	Expiration Date (ExDP):	<b>9/30/2028</b>		
Water Index Number:	<b>H</b>	Item No.:	<b>5</b>	Modification Dates (EDPM):	<b>-</b>
Compact Area:	<b>-</b>				

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. '1251 et. seq.)

PERMITTEE NAME AND ADDRESS						
Name:	<b>Albany Port District Commission</b>			Attention:	<b>Richard Hendrick</b>	
Street:	<b>106 Smith Blvd</b>					
City:	<b>Albany</b>			State:	<b>NY</b>	Zip Code: <b>12202</b>
Email:	<a href="mailto:Rhendrick@portofalbany.us">Rhendrick@portofalbany.us</a>			Phone:	<b>518-463-8763</b>	

is authorized to discharge from the facility described below:

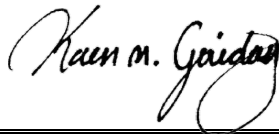
FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL							
Name:	<b>Marmen – Welcon Manufacturing Plant</b>						
Address / Location:	<b>309 River Road</b>				County:	<b>Albany</b>	
City:	<b>Albany</b>			State:	<b>NY</b>	Zip Code:	<b>12077</b>
Facility Location:	Latitude:	<b>42</b> °	<b>36</b> ' <b>22</b> " N	& Longitude:	<b>73</b> °	<b>45</b> ' <b>57</b> " W	
Primary Outfall No.:	<b>001</b>	Latitude:	<b>42</b> °	<b>36</b> ' <b>24</b> " N	& Longitude:	<b>73</b> °	<b>45</b> ' <b>48</b> " W
Wastewater Description:	<b>Sanitary</b>	Receiving Water:	<b>Hudson River</b>		NAICS:	<b>-</b>	Class: <b>C</b> Standard: <b>C</b>

and the additional outfalls listed in this permit, in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

#### DISTRIBUTION:

CO BWP - Permit Coordinator  
BWP – Permit Writer  
CO BWC - SCIS  
RWE  
RPA  
EPA Region II

Permit Administrator:	<b>Karen M. Gaidasz</b>		
Address:	<b>625 Broadway Albany, NY 12233-1750</b>		
Signature:		Date:	<b>08 / 31 / 2023</b>

## Contents

SUMMARY OF ADDITIONAL OUTFALLS.....	3
DEFINITIONS.....	4
PERMIT LIMITS, LEVELS AND MONITORING.....	5
STORMWATER POLLUTION PREVENTION REQUIREMENTS .....	7
BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES .....	8
MERCURY MINIMIZATION PROGRAM (MMP) - Type IV.....	11
DISCHARGE NOTIFICATION REQUIREMENTS.....	13
MONITORING LOCATIONS.....	14
GENERAL REQUIREMENTS.....	15
RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS.....	16
D.    Schedule of Additional Submittals: .....	16

## SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
<b>01A</b>	<b>Plain (no detergent) Wash Water and Compressor Condensate</b>		<b>42</b> °	<b>36</b> '	<b>18</b> " N	<b>73</b> °	<b>46</b> '	<b>3</b> " W
Receiving Water:	<b>Hudson River via Outfall 001</b>					Class:	<b>C</b>	

## DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

## PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Sanitary	Hudson River	10/1/2023	9/30/2028

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	13,300	GPD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	1/day	Grab		X	
	Daily Maximum	9.0	SU	-	-					
Temperature	Daily Maximum	Monitor	°F	-	-	1/day	Grab		X	
BOD <sub>5</sub>	Monthly Average	30	mg/L	-	-	1/month	6-hr. Comp.	X	X	
	Minimum Monthly Average	85	%	-	-	1/month	6-hr. Comp.		X	1
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	-	-	1/month	Select	X	X	
	Minimum Monthly Average	85	%	-	-	1/month	6-hr. Comp.		X	1
Settleable Solids	Daily Maximum	0.3	mL/L	-	-	1/day	Grab		X	
Dissolved Oxygen	Daily Minimum	Monitor	mg/L	-	-	1/day	Grab		X	
Ammonia (as N) June 1 <sup>st</sup> – October 31 <sup>st</sup>	Monthly Average	4.2	mg/L	-	-	1/month	6-hr. Comp.		X	
Ammonia (as N) November 1 <sup>st</sup> – May 31 <sup>st</sup>	Monthly Average	6.4	mg/L	-	-	1/month	6-hr. Comp.		X	
Oil & Grease	Daily Maximum	15	mg/L	-	-	1/month	Grab		X	

EFFLUENT DISINFECTION		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Required Seasonal from May 1st - October 31st										
Coliform, Fecal	30-Day Geometric Mean	200	No./100 mL	-	-	1/month	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./100 mL	-	-	1/month	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L	-	-	1/month	Grab		X	2

**For Footnotes, See Page 6**

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Wash Water and Compressor Condensate	Hudson River via Outfall 001	10/1/2023	9/30/2028

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS		FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	
Flow	Daily Maximum	2,100	GPD			1/month	Estimate	
pH	Daily Minimum	6.0	SU	-	-	1/month	Grab	
	Daily Maximum	9.0	SU	-	-			
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L	-	-	1/month	Grab	
Oil & Grease	Daily Maximum	15	mg/L	-	-	1/month	Grab	
Foam (visible)	Daily Maximum	None	visible	-	-	1/month	Grab	3

#### FOOTNOTES:

1. Effluent shall not exceed 15% and 15% of influent concentration values for BOD<sub>5</sub> and TSS respectively.
2. Sampling and reporting for total residual chlorine is only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
3. **Visible Foam Analytical Method Procedure**
  - a. Fill one (1) 500 mL narrow mouth bottle (glass or plastic) with effluent water to be tested.
  - b. Upon return to the lab, fill a 1000 mL Wheaton narrow mouth glass sample bottle to the 200 mL mark with effluent from the 500mL bottle.
  - c. Place the bottle with 200 mL of sample in a constant-temperature bath for a minimum of 1 hour and a maximum of 2 hours at 25 ± 1°C (77 ± 1.8°F).
  - d. Measure the temperature of the sample and adjust to 25 ± 1°C (77 ± 1.8°F) if necessary.
  - e. Remove the sample from the constant-temperature bath.
  - f. Vigorously shake the sample bottle using a minimum of an 8-inch stroke and 40 shakes in less than 10 seconds.
  - g. After completing 40 shakes, start a timer and allow the bottle to stand undisturbed.
  - h. If any foam remains after 60 seconds, the sample will be noted as containing visible foam. If no foam remains after 60 seconds the sample will be noted as not containing visible foam.

## STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector AA (GP-0-23-001).

## BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

Note that for some facilities, especially those with few employees or limited industrial activities, some of the below BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the New York State Department of Environmental Conservation (Department) as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.
2. **Compliance Deadlines** – The initial BMP plan shall be submitted in accordance with the Schedule of Submittals to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at [https://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/form2c.pdf](https://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf)) or that are required to be monitored for by the SPDES permit. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

- |                                     |   |                                 |
|-------------------------------------|---|---------------------------------|
| 1. BMP Pollution Prevention Team    | 6. Security   | 10. Spill Prevention & Response |
| 2. Reporting of BMP Incidents       | 7. Preventive Maintenance                             | 11. Erosion & Sediment Control  |
| 3. Risk Identification & Assessment | 8. Good Housekeeping                                  | 12. Management of Runoff        |
| 4. Employee Training                | 9. Materials/Waste Handling, Storage, & Compatibility | 13. Street Sweeping             |
| 5. Inspections and Records          |   |                                 |



## BMPs FOR INDUSTRIAL FACILITIES (continued)

4. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters** - A SWPPP shall be developed prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area<sup>1</sup>. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at [www.dec.ny.gov/chemical/43133.html](http://www.dec.ny.gov/chemical/43133.html)) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.
5. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or BAT treatment of wastewaters emanating from the segment.
6. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.
  - A. **Spill Cleanup** - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup, the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise, it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.
  - B. **Discharge Operation** - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

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<sup>1</sup> Uncontaminated area means soils which are free of contamination by any toxic or non-conventional pollutants identified in the tables of SPDES Application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges.

## BMPs FOR INDUSTRIAL FACILITIES (continued)

C. Discharge Screening - Prior to each discharge from a secondary containment system the stormwater must be screened for contamination.\* All stormwater must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample\*\* of the stormwater. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise, it must either be disposed of in an onsite or off-site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge\* following any cleaned-up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.\*\*

(b) Every fourth discharge\* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.\*\*

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge\* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present.\*\*

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

F. Prohibited Discharges - **In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained firefighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire-retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

\* Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

\*\* If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes. If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (PAHs). The analytical methods selected for monitoring the stored substances are to be the most sensitive in detecting and quantifying the target analytes as approved under 40 CFR Part 136 and in compliance with NYSDOH ELAP certified methods or as directed by the Department. If the substance(s) are listed in the tables of SPDES Application Form NY-2C then sampling is required. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

## MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On June 17, 2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. **General** - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. **MMP Elements** - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements<sup>2</sup> as described in detail below:
  - a. **Conditional Exclusion Certification** - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfalls for the facility are neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
    - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)<sup>3</sup> communities and/or 2) Type II sanitary sewer overflow (SSO)<sup>4</sup> facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)<sup>5</sup> that may discharge mercury;
    - The facility accepts hauled wastes; or,
    - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
  - b. **Control Strategy** - The control strategy must contain the following minimum elements:
    - i. **Equipment and Materials** – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
    - ii. **Bulk Chemical Evaluation** – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

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<sup>2</sup>Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.

<sup>3</sup>CSO permits are included under the 05 and 07 permit classifications.

<sup>4</sup>These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

<sup>5</sup>CIUs include those listed under Federal Regulation in 40 CFR Part 400.

## MERCURY MINIMIZATION PROGRAM (MMP) – Type IV (Continued)

- c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), summarizing:
- i. Review of criteria to determine if the facility has a potential mercury source;
    - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated permit modification;
  - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
  - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

The permittee must maintain a file with all MMP documentation. The file must be available for review by Department representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

3. **MMP Modification** - The MMP must be modified whenever:
- a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
  - b. A letter from the Department identifies inadequacies in the MMP.

The Department may use information in the annual status reports, in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

### DEFINITIONS:

Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

## DISCHARGE NOTIFICATION REQUIREMENTS

- (a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

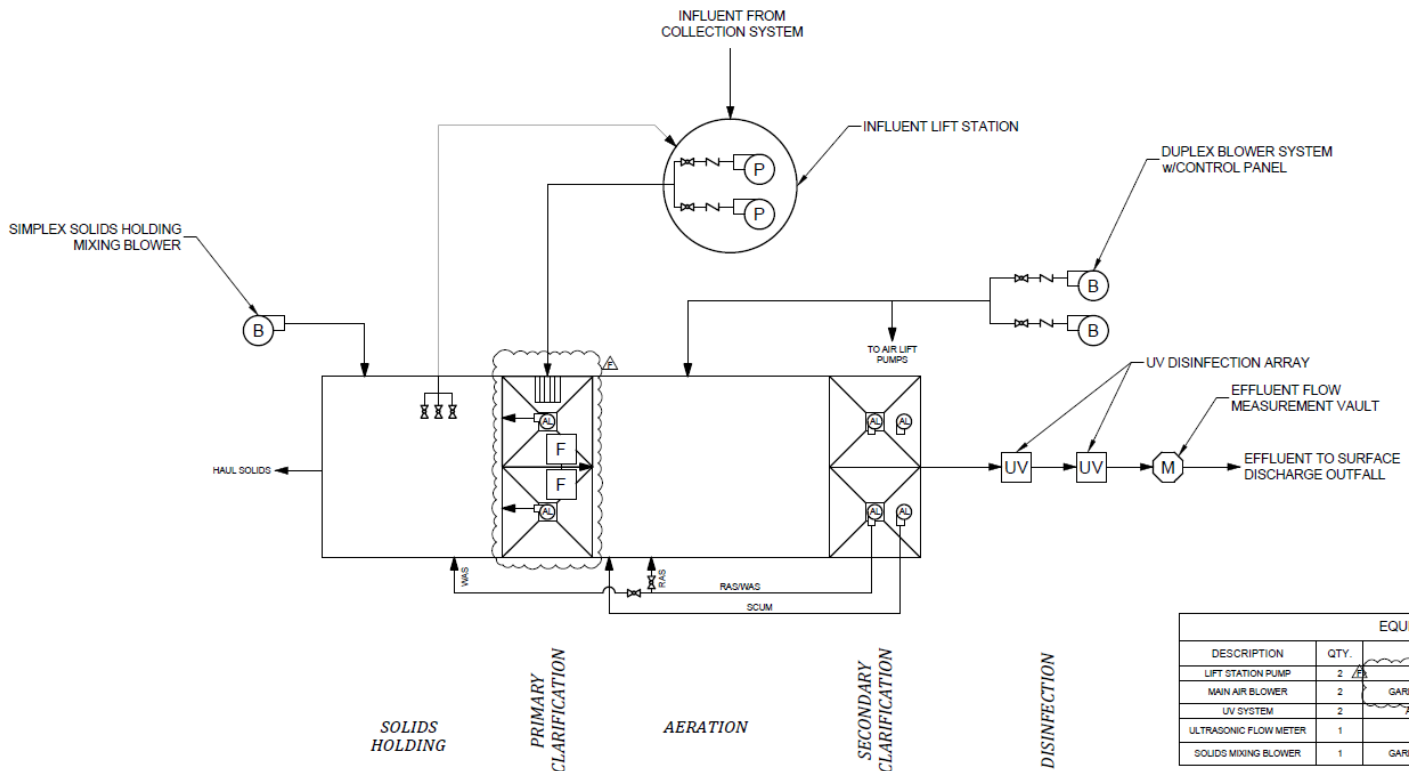
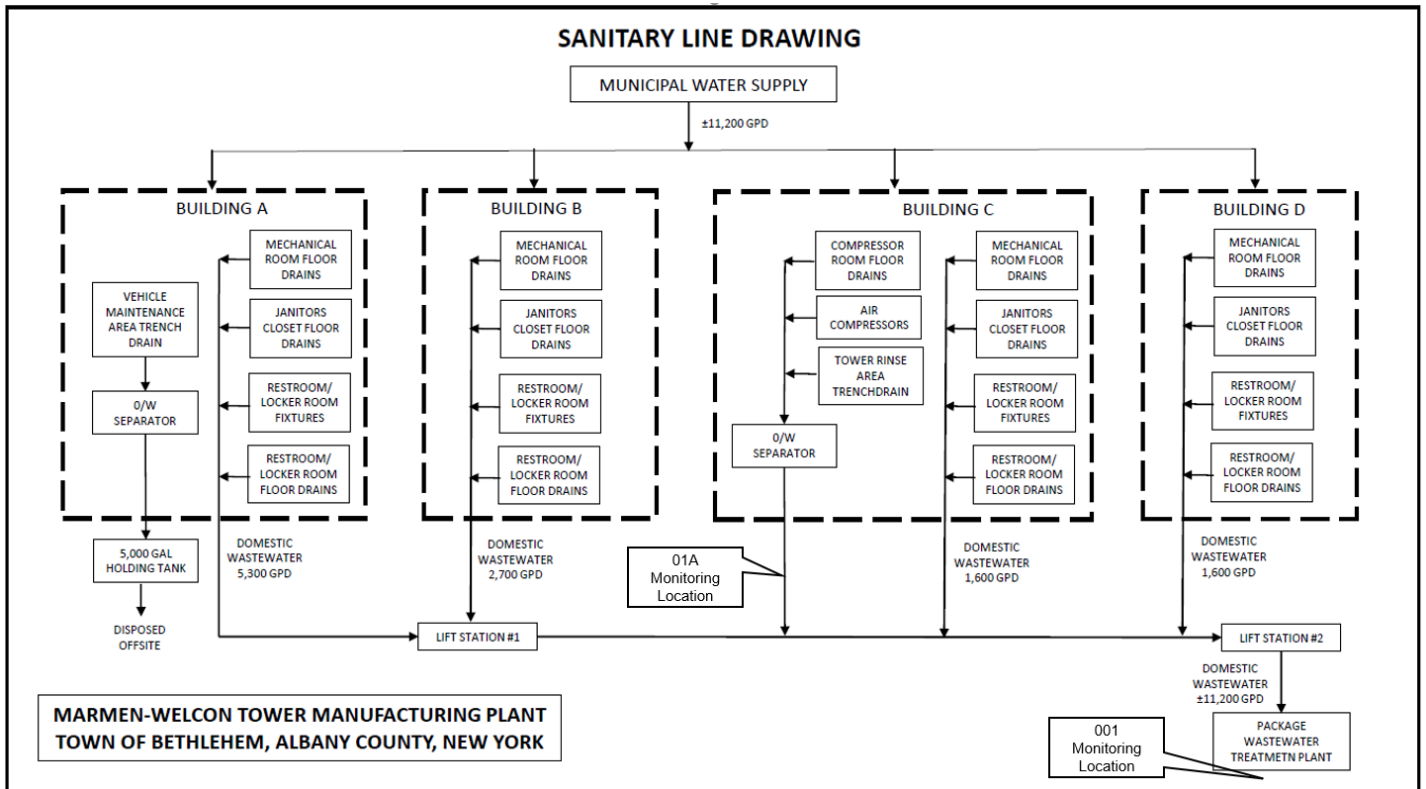
The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

<p><b>N.Y.S. PERMITTED DISCHARGE POINT</b></p> <p><b>SPDES PERMIT No.: NY_____</b></p> <p><b>OUTFALL No. : _____</b></p>
For information about this permitted discharge contact:
Permittee Name: _____
Permittee Contact: _____
Permittee Phone:       ( ) - ### - #####
OR:
NYSDEC Division of Water Regional Office Address:
NYSDEC Division of Water Regional Phone: ( ) - ### - #####

- (e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

# MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



## GENERAL REQUIREMENTS

- A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:
- B. General Conditions
- |  |   |
|--|---|
| 1. Duty to comply                                | 6 NYCRR 750-2.1(e) & 2.4                |
| 2. Duty to reapply                               | 6 NYCRR 750-1.16(a)                     |
| 3. Need to halt or reduce activity not a defense | 6 NYCRR 750-2.1(g)                      |
| 4. Duty to mitigate                              | 6 NYCRR 750-2.7(f)                      |
| 5. Permit actions                                | 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights                               | 6 NYCRR 750-2.2(b)                      |
| 7. Duty to provide information                   | 6 NYCRR 750-2.1(i)                      |
| 8. Inspection and entry                          | 6 NYCRR 750-2.1(a) & 2.3                |
- C. Operation and Maintenance
- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Proper Operation & Maintenance | 6 NYCRR 750-2.8                      |
| 2. Bypass                         | 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset                          | 6 NYCRR 750-1.2(a)(94) & 2.8(c)      |
- D. Monitoring and Records
- |                           |  |
|---------------------------|--|
| 1. Monitoring and records | 6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) |
| 2. Signatory requirements | 6 NYCRR 750-1.8 & 2.5(b)   |
- E. Reporting Requirements
- |   |                                   |
|---|-----------------------------------|
| 1. Reporting requirements for non-POTWs | 6 NYCRR 750-2.5, 2.6, 2.7, & 1.17 |
| 2. Anticipated noncompliance            | 6 NYCRR 750-2.7(a)                |
| 3. Transfers                            | 6 NYCRR 750-1.17                  |
| 4. Monitoring reports                   | 6 NYCRR 750-2.5(e)                |
| 5. Compliance schedules                 | 6 NYCRR 750-1.14(d)               |
| 6. 24-hour reporting                    | 6 NYCRR 750-2.7(c) & (d)          |
| 7. Other noncompliance                  | 6 NYCRR 750-2.7(e)                |
| 8. Other information                    | 6 NYCRR 750-2.1(f)                |
- F. Sludge Management
- The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.
- G. SPDES Permit Program Fee
- The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.
- H. Water Treatment Chemicals (WTCs)
- New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the Department.
  2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
  3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at: <http://www.dec.ny.gov/permits/93245.html>

## RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.
- B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each 1 month reporting period in accordance with the DMR Manual available on Department's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at <https://www.dec.ny.gov/chemical/103774.html>. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

- C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation  
 Division of Water, Bureau of Water Permits  
 625 Broadway, Albany, New York 12233-3505

Phone: (518) 402-8111

Department of Environmental Conservation  
 Regional Water Engineer, Region 4

1130 North Westcott Road, Schenectady, New York, 12306-2014 Phone: (518) 357-2045

- D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001, 01A	<u>COMPLETION OF CONSTRUCTION</u> The permittee shall provide a Certificate of Completion <sup>6</sup> (COC) to DEC that the treatment system has been completed in accordance with the approved Design Documents.	With 30 days of Completion of Construction
001, 01A	<u>COMMENCEMENT OF OPERATION</u> Upon submission of the COC, the permittee shall comply with the final effluent limitations described in this permit.	Upon Submission of COC

<sup>6</sup> 6 NYCRR 750-2.10 (c)



Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001, 01A	<p><u>SHORT TERM MONITORING PROGRAM</u> For Outfalls 001 and 01A, the permittee shall complete a short term monitoring program. The permittee must collect quarterly samples for a period of 1 year for pollutants as identified in the NY-2C SPDES application, Tables A – D. Samples must be representative of normal discharge conditions and treatment operations at the facility.</p> <p>The permittee must use approved EPA analytical methods with the lowest possible detection limit as promulgated under 40 CFR Part 136 for the determination of the concentrations of parameters listed. Method 1631 shall be used for Mercury analysis. Method 1633 shall be used for analysis of PFAS.</p> <p>Quarterly sampling must begin during the first quarter of 2025, unless otherwise approved by DEC. DEC must be notified at least 30 days before sampling is to commence.</p>	Submit sample results no later than January 28, 2026
-	<p><u>BMP PLAN</u> The permittee shall submit and annually review the completed BMP plan. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.</p>	EDP + 6 Months, Annually thereafter on January 28 <sup>th</sup>
001, 01A	<p><u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.</p>	Annually on January 28 <sup>th</sup> if WTCs are used
001	<p><u>MERCURY MINIMIZATION PLAN - SAMPLING</u> Complete Mercury Sampling as required in Short Term Monitoring Program above.</p>	Submit sample results no later than January 28, 2026
001	<p><u>MERCURY MINIMIZATION PLAN – ANNUAL STATUS REPORT</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.</p>	Annually on January 28 <sup>th</sup>
001	<p><u>MERCURY - CONDITIONAL EXCLUSION CERTIFICATION</u> Permittee must submit a mercury conditional exclusion certification every five years to maintain MMP Type IV status.</p>	EDP + 5 years, every 5 years thereafter

**Unless noted otherwise, the above actions are one-time requirements.**

- E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
- G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

- H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
  
- I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

**SPDES Permit Fact Sheet**  
**Albany Port District**  
**Commission**  
**Marmen-Welcon Manufacturing**  
**Plant**  
**NY0312924**



## Contents

Summary of Permit Changes .....	3
Administrative History .....	3
Facility Information .....	3
Site Overview .....	4
Existing Effluent Quality .....	5
Receiving Water Information .....	5
Impaired Waterbody Information.....	6
Critical Receiving Water Data & Mixing Zone .....	6
Permit Requirements .....	7
Whole Effluent Toxicity (WET) Testing .....	7
Anti-backsliding .....	7
Antidegradation .....	7
Discharge Notification Act Requirements.....	7
Best Management Practices (BMPs) for Industrial Facilities .....	7
Stormwater Pollution Prevention Requirements.....	7
Schedule(s) of Additional Submittals .....	8
OUTFALL AND RECEIVING WATER SUMMARY TABLE .....	9
POLLUTANT SUMMARY TABLE.....	9
Outfall 001 .....	9
Outfall 01A .....	13
Appendix: Regulatory and Technical Basis of Permit Authorizations.....	16
Regulatory References.....	16
Outfall and Receiving Water Information .....	16
Existing Effluent Quality.....	17
Permit Requirements.....	17

## Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Marmen-Welcon Manufacturing Plant.

**This factsheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the [Appendix](#) linked throughout this factsheet.**

## Administrative History

6/1/2022 The Albany Port District Commission submitted a NY-2C permit application for a new facility. Revised NY-2C permit applications were submitted 8/3/22 and 5/17/23.

The Notice of Complete Application, published in the [Environmental Notice Bulletin](#) and newspapers, contains information on the public notice process.

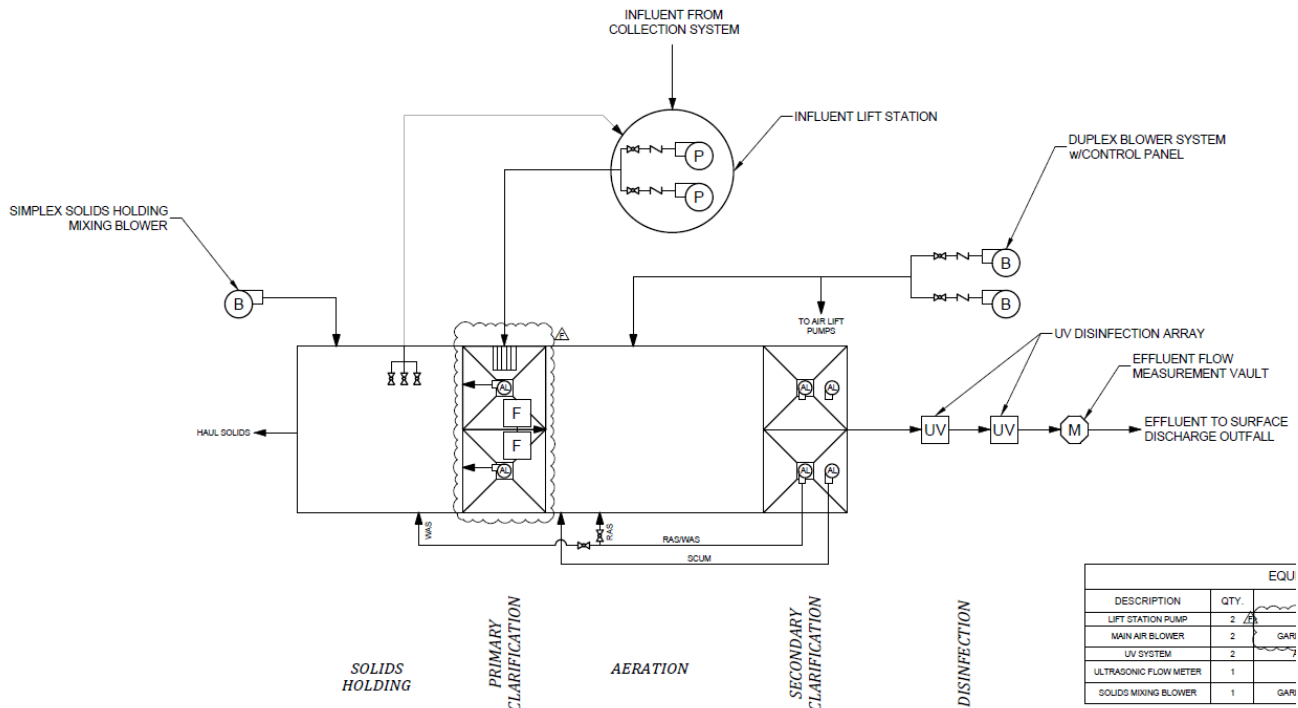
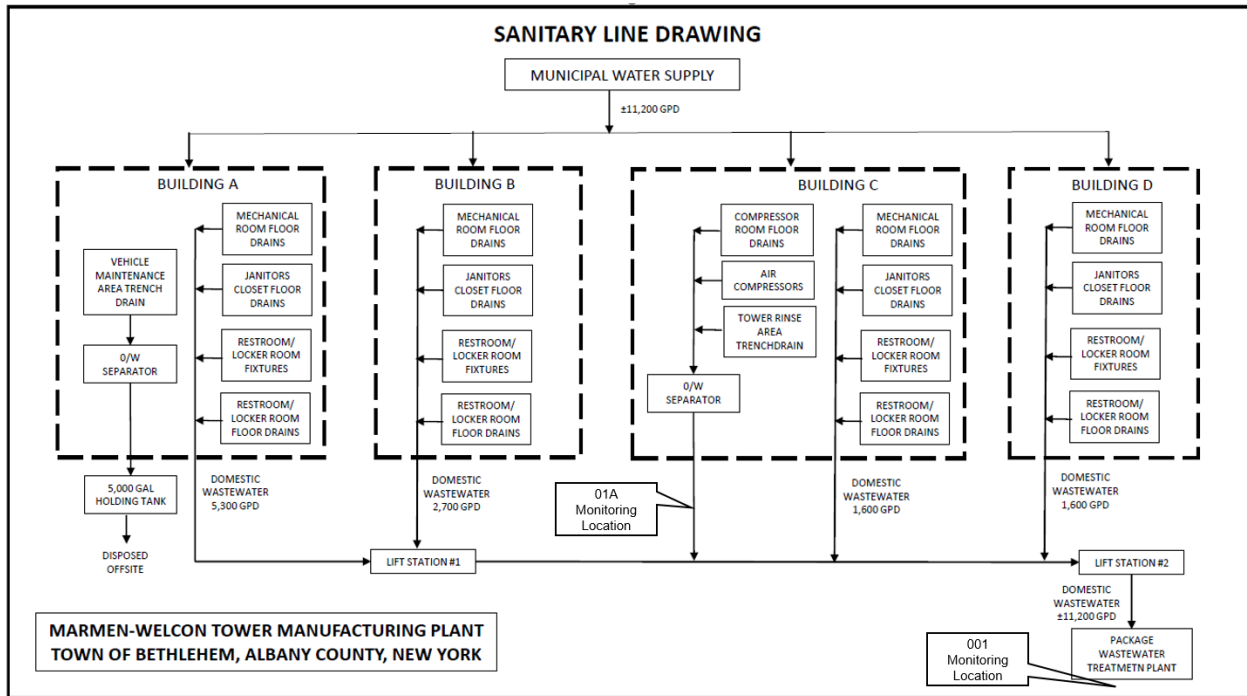
## Facility Information

This is an industrial facility (SIC codes 3499, 3449, 3999) that fabricates and manufactures offshore wind tower sections and transition piece sections. The tower sections will be coated in Ecogel (primary ingredient propylene glycol) and rinsed for final phases of manufacturing. The treatment system will be constructed in 2023. Tower washdown and compressor condensate will be treated through an oil and water separator. The vehicle maintenance area will go to an oil and water separator followed by a holding tank for off-site disposal. Restrooms and locker room floor drains will go to the package wastewater treatment plant for treatment. The package plant will provide aerobic digestion and includes the following treatment units:

- Preliminary Treatment: Screening
- Primary Treatment: Primary Clarification
- Secondary Treatment: Activated Sludge
- Disinfection: UV

Sludge will be wet hold and haul.

### Site Overview



### Existing Effluent Quality

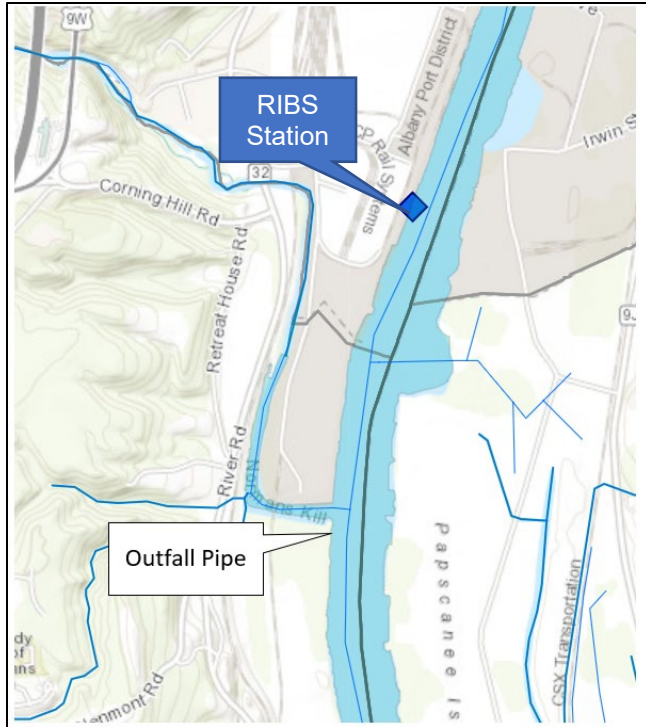
The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from the application submitted by the permittee. [Appendix Link](#)

### Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001		Treated Sanitary Sewage	Hudson River, Class C
01A (internal)		Plain (no detergent) wash water, air compressor condensate	Hudson River via 001, Class C
DR-1		Stormwater	Authorized under MSGP permit
DR-2		Stormwater	Authorized under MSGP permit
DR-3		Stormwater	Authorized under MSGP permit
DR-4		Stormwater	Authorized under MSGP permit
DR-5		Stormwater	Authorized under MSGP permit
DR-6		Stormwater	Authorized under MSGP permit
DR-7		Stormwater	Authorized under MSGP permit

**Reach Description:** The outfall for the facility discharges to the Hudson River (PWL ID 1301-0002) at the confluence of the Normans Kill (H-221-4). The outfall pipe will be above Mean High Water (MHW).



See the [Outfall and Receiving Water Summary Table](#) and [Appendix](#) for additional information.

### Impaired Waterbody Information

The Hudson River segment (PWL No. 1301-0002) was first listed on the 1998 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters as impaired due to PCBs from contaminated sediment. The segment continues to be listed as of the 2018 NYS Section 303(d) List. A TMDL has not been developed to address the impairment, and therefore, there are no applicable wasteload allocations (WLAs) for this facility.

### Critical Receiving Water Data & Mixing Zone

Outfall 001 discharges to Hudson, which is a classified tidal waterbody. New York State Department of Environmental Conservation (NYSDEC or Department) Guidance (TOGS 1.3.1) states that a dilution ratio of 10:1 is appropriate for a fully submerged outfall discharging directly into a tidal waterbody. The discharge terminus point for this outfall is at the shoreline (bank discharge) and therefore the effluent mixing with the tidal waterbody will take place along the shoreline rather than the open waters of the Hudson River. The mixing intensity will be reduced due to low momentum of the discharge resulting in less dilution than the specified guidance value; therefore, a dilution ration of 5:1 for acute, chronic, and Human, Aesthetic, Wildlife (HEW) protections is appropriate and has been included in this permit.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	5:1	5:1	5:1	TOGS 1.3.1 (for ponded or tidal waterbodies)



Critical receiving water data are listed in the [Pollutant Summary Table](#) at the end of this fact sheet. [Appendix Link](#)

## Permit Requirements

The technology based effluent limitations ([TBELs](#)), water quality-based effluent limitations ([WQBELs](#)), [Existing Effluent Quality](#) and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the [Pollutant Summary Table](#).

### Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing is not included in the permit. [Appendix Link](#)

### Anti-backsliding

This is a new permit; therefore, anti-backsliding does not apply.

### [Appendix Link](#)

### Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)<sup>1</sup> determination. [Appendix Link](#)

### Discharge Notification Act Requirements

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement is new.

Additionally, the permit contains a requirement to make the Discharge Monitoring Report (DMR) sampling data available to the public upon request. This requirement is new.

### Best Management Practices (BMPs) for Industrial Facilities

In accordance with 6 NYCRR 750-1.14(f) and 40 CFR 122.44(k), the permittee is required to develop and implement a BMP plan that prevents, or minimizes the potential for, the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

### Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6).

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [AA] (GP-0-23-001).

---

<sup>1</sup> As prescribed by 6 NYCRR Part 617

### Schedule(s) of Additional Submittals

A schedule of additional submittals has been included for the following ([Appendix Link](#)):

- Complete Construction – Provide a Certificate of Completion
- Commence Operation
- Short Term Monitoring for New Discharges
  - Since this is a new facility, parameters listed under Tables A-D of the NY-2C SPDES application are required to be sampled to identify any other parameters associated with the industrial activities at the facility. In accordance with TOGS 1.3.13, emerging contaminants will be sampled as well.
- Water Treatment Chemical (WTC) Annual Report Form
- Best Management Practices Plan
- Mercury Minimization Plan – Sampling
- Mercury Minimization Plan – Annual Status Report
- Mercury – Conditional Exclusion Certification

## OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (GPD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 36' 24" N	73° 45' 48" W	Hudson River	C	H-5 PWL: 1301-0002	13 / 01	80 <sup>5</sup>	Tidal Waterbody			13,300	5:1	5:1	5:1
01A	42° 36' 18" N	73° 46' 3" W	Hudson River via Outfall 001	C	H-5 PWL: 1301-0002	13 / 01	80 <sup>2</sup>	Tidal Waterbody			2,100	5:1	5:1	5:1

## POLLUTANT SUMMARY TABLE

### Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>3</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>Outfall #</b>	001	<b>Description of Wastewater:</b> Treated Sanitary Sewer and Plain (no detergent) Wash Water, Air Compressor Condensate from Outfall 01A.													
		<b>Type of Treatment:</b> Screening, Primary Clarification, Activated Sludge, UV Disinfection													
<b>General Notes:</b> This is a new facility; therefore, existing discharge data is not available. Proposed data was obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Monthly Avg	-	-	-	<b>13,300</b>	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL
	The flow limit is set at the design flow of the wastewater treatment facility.														
pH	SU	Minimum	-	-	-	<b>6.0</b>	TOGS 1.2.1	7.90 <sup>4</sup>	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	-	-	-	<b>9.0</b>									
Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.															

<sup>2</sup> Ambient hardness data obtained from RIBS Station 13-LHUD-125.8.

<sup>3</sup> Existing Effluent Quality: Permittee's estimate based on NY-2C application submitted for a new facility.

<sup>4</sup> Ambient pH obtained from HRECOS Port of Albany Water Quality 2016 data, 80th percentile.

Outfall #	001	Description of Wastewater: Treated Sanitary Sewer and Plain (no detergent) Wash Water, Air Compressor Condensate from Outfall 01A.													
		Type of Treatment: Screening, Primary Clarification, Activated Sludge, UV Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>3</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	-	-	-	<b>Monitor</b>	750-1.13 Monitor	-	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... shall not be raised or lowered to more than 5F over the temperature that existed before the addition				704.2	-	TBEL
			Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.												
Dissolved Oxygen (DO)	mg/L	Daily Min	-	-	-	2.0	TOGS 1.3.3	-	-	(Non-Trout) 4.0 mg/L	Narrative	-	703.3	-	Monitor
			As the facility is discharging to the tidal portion on the Hudson River (downstream of Troy Dam) DO sag curve models cannot be performed. As the flow of the facility is orders of magnitude smaller than flow of the Hudson River the need for WQBELs for DO and BOD <sub>5</sub> are unnecessary and the TBELs are protective of water quality.												
5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	Monthly Avg	-	-	-	<b>30</b>	TOGS 1.3.3	-	See Dissolved Oxygen			-	703.3	-	TBEL
		7 Day Avg	-	-	-	-	-					-			
	lbs/d	Monthly Avg	-	-	-	-	-					-			
		7 Day Avg	-	-	-	-	-					-			
	% Rem	Minimum	-	-	-	<b>85</b>	TOGS 1.3.3					-			
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. See justification for Dissolved Oxygen. Sampling will be conducted monthly, therefore, 7-day average limit is not necessary.															
Total Suspended Solids (TSS)	mg/L	Monthly Avg	-	-	-	<b>30</b>	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			703.2	-	TBEL	
		7 Day Avg	-	-	-	-	-								-
	lbs/d	Monthly Avg	-	-	-	-	-								-
		7 Day Avg	-	-	-	-	-								-
	% Rem	Minimum	-	-	-	<b>85</b>	TOGS 1.3.3								-
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is reasonably protective of water quality standards. Sampling will be conducted monthly, therefore, 7-day average limit is not necessary.															

Outfall #	001	Description of Wastewater: Treated Sanitary Sewer and Plain (no detergent) Wash Water, Air Compressor Condensate from Outfall 01A.													
		Type of Treatment: Screening, Primary Clarification, Activated Sludge, UV Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>3</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	-	-	-	<b>0.3</b>	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
			Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Given that adequate dilution is available the TBEL is reasonably protective of WQS.												
Nitrogen, Ammonia (as N) June 1 <sup>st</sup> – Oct. 31 <sup>st</sup>	mg/L	Monthly Avg	-	-	-	-	-	0.081	-	.91	A(C)	<b>4.2</b>	703.5	-	WQBEL
			The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.9 and a temperature of 25. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. The pH of the receiving waterbody was calculated from HRECOS Port of Albany Water Quality 2016 data, 80th percentile. In accordance with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the applicable WQBEL for the facility.												
Nitrogen, Ammonia (as N) Nov. 1 <sup>st</sup> – May 31 <sup>st</sup>	mg/L	Monthly Avg	-	-	-	-	-	0.081	-	1.34	A(C)	<b>6.4</b>	703.5	-	WQBEL
			The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.9 and a temperature of 10. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. The pH of the receiving waterbody was calculated from HRECOS Port of Albany Water Quality 2016 data, 80th percentile. In accordance with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the applicable WQBEL for the facility.												
Total Mercury	ng/L	Daily Max	-	-	-	-	ILCA	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	ng/L	12 MRA	-	-	-	-	EEQ	-	-	0.7	H(FC)	-	-	-	
	There are no known sources of mercury at the facility. Confirmatory sampling will be conducted after operation commences. See <a href="#">Mercury section of this factsheet for more details.</a>														

Outfall #	001	Description of Wastewater: Treated Sanitary Sewer and Plain (no detergent) Wash Water, Air Compressor Condensate from Outfall 01A.													
		Type of Treatment: Screening, Primary Clarification, Activated Sludge, UV Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>3</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Coliform, Fecal	#/100 ml	30d Geo Mean	-	-	-	<b>200</b>	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	-	-	-	<b>400</b>	TOGS 1.3.3	-							
Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.															
Total Residual Chlorine (TRC)	mg/L	Daily Max	-	-	-	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.025	703.5	<b>0.03</b>	ML
Seasonal effluent disinfection is being added to the permit. Only if you are using chlorine for disinfection. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.030 mg/L is appropriate.															
Additional Pollutants Detected															
Oil & Grease	mg/L	Daily Max	-	-	-	<b>15</b>	TOGS 1.2.1	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2		TBEL
1,2 Propylene Glycol (CAS 57-55-6)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
There is no applicable water quality standard or guidance value for propylene glycol. Propylene glycol has an oxygen demanding component. The current limits for BOD <sub>5</sub> and dissolved oxygen will account and be protective of the dissolved oxygen in the receiving waterbody.															
[2-(2-Methoxymethylethoxy) methylethoxy] propanol (CAS 25498-49-1)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
There is no applicable water quality standard or guidance value for [2-(2-Methoxymethylethoxy) methylethoxy] propanol. No monitoring is required at this time.															
Hydroxyethyl Cellulose (CAS 9004-62-0)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
There is no applicable water quality standard or guidance value for hydroxyethyl cellulose. No monitoring is required at this time.															

Outfall #	001	Description of Wastewater: Treated Sanitary Sewer and Plain (no detergent) Wash Water, Air Compressor Condensate from Outfall 01A.														
		Type of Treatment: Screening, Primary Clarification, Activated Sludge, UV Disinfection														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality <sup>5</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
Diethanolamine (CAS 111-42-2)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
There is no applicable water quality standard or guidance value for diethanolamine.																

Outfall 01A

Outfall #	01A	Description of Wastewater: Plain (no detergent) Wash Water, Air Compressor Condensate														
		Type of Treatment: Oil & Water Separator														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality <sup>5</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
<b>General Notes:</b> This is a new facility. Therefore, existing discharge data is not available. Proposed obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	GPD	Monthly Avg	-	-	-	<b>2,100</b>	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL	
	The flow limit is set at the design flow of the wastewater treatment facility.															
pH	SU	Minimum	-	-	-	<b>6.0</b>	TOGS 1.2.1	-	-	6.5 – 8.5	Range	-	703.3	-	TBEL	
		Maximum	-	-	-	<b>9.0</b>		Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.								
Temperature	°F	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>	
	Outfall 01A is an internal outfall. Temperature will be monitored at Outfall 001.															
Total Suspended Solids	mg/L	Monthly Avg	-	-	-	<b>50</b>	BPJ	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL	
		7 Day Avg	-	-	-	-	-									

<sup>5</sup> Existing Effluent Quality: Permittee's estimate based on NY-2C application submitted for a new facility.

Permittee: Albany Port District Commission  
 Facility: Marmen-Welcon Manufacturing Plant  
 SPDES Number: NY0312924  
 USEPA Non-Major/Class 01 Industrial

Date: August 31, 2023 v.1.13  
 Permit Writer: Bonnie Starr  
 Water Quality Reviewer: Edward Schneider

Outfall #	Description of Wastewater: Plain (no detergent) Wash Water, Air Compressor Condensate														
	Type of Treatment: Oil & Water Separator														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>5</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>Additional Pollutants Detected</b>															
Oil & Grease	mg/L	Daily Max	-	-	-	15	TOGS 1.2.1	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2		TBEL
Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.															
1,2 Propylene Glycol (CAS 57-55-6)															
Not listed in TOGS 1.1.1 or 703.5. Propylene Glycol has an oxygen demanding component. On Outfall 001 the BOD <sub>5</sub> will help ensure the DO standard in protected in the Hudson.															
[2-(2-Methoxymethyl ethoxy) methylethoxy] propanol (CAS 25498-49-1)															
Not list in TOGS 1.1.1 or 703.5. No monitoring required at this time.															
Hydroxyethyl Cellulose (CAS 9004-62-0)															
Not list in TOGS 1.1.1 or 703.5. No monitoring required at this time.															
Diethanolamine (CAS 111-42-2)															
Not list in TOGS 1.1.1 or 703.5. No monitoring required at this time.															



Permittee: Albany Port District Commission  
 Facility: Marmen-Welcon Manufacturing Plant  
 SPDES Number: NY0312924  
 USEPA Non-Major/Class 01 Industrial

Date: August 31, 2023 v.1.13  
 Permit Writer: Bonnie Starr  
 Water Quality Reviewer: Edward Schneider

Outfall #	01A	Description of Wastewater: Plain (no detergent) Wash Water, Air Compressor Condensate													
		Type of Treatment: Oil & Water Separator													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>5</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. QBEL	Basis for QBEL		
Foam (visible)	mg/L	Daily Max	-	-	-	<b>No visible foam</b>	BPJ	-	-	-	-	-	-	-	TBEL
Facility shall use plain, non-detergent water for rinsing. No visible foam shall be present.															

## Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the factsheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

### Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the factsheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

### Outfall and Receiving Water Information

#### Impaired Waters

The [NYS 303\(d\) List of Impaired/TMDL Waters](#) identifies waters where specific best usages are not fully supported. The Department must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a WLA of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed to

determine the existing capabilities of the wastewater treatment plants and to assure that wasteload allocations (WLAs) are allocated equitably.

### Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95<sup>th</sup> (monthly average) and 99<sup>th</sup> (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The [Pollutant Summary Table](#) identifies the number of sample data points available.

### Permit Requirements

#### Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of ECL Article 17, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

#### Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law<sup>6</sup> and USEPA interpretation<sup>7</sup> anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

#### Antidegradation Policy

The Department implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

#### Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed

<sup>6</sup> American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

<sup>7</sup> U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

### *Technology-based Effluent Limitations (TBELs) for Industrial Facilities*

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies and/or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and/or Best Professional Judgment (BPJ).

### *USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility*

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the [USEPA Effluent Limitation Guideline Calculations Table](#).

### *Best Professional Judgement (BPJ)*

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with CWA 402(a)(1) and ECL Section 17-0811, the Department is authorized to issue a permit containing “any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law”. BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

### *Water Quality-Based Effluent Limitations (WQBELs)*

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA Section 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to ECL 17-0301. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The Department considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

### *Mixing Zone Analyses*

In accordance with TOGS 1.3.1., the Department may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following: “EPA Technical Support Document for Water Quality-Based Toxics Control” (March 1991); EPA Region VIII’s “Mixing Zones and Dilution Policy” (December 1994); NYSDEC TOGS 1.3.1, “Total Maximum Daily Loads and Water Quality-Based Effluent Limitations” (July 1996); “CORMIX v11.0” (2019).

### *Critical Flows*

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical

low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. Nevertheless, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. Nevertheless, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

#### Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

- 1) Identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the Department;
- 2) Identify water quality criteria applicable to these pollutants;
- 3) Determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and
- 4) Calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The Department uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e., numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the Department uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

A Watershed Maximum Daily Load (WMDL) may be developed by the Department to account for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments. The WMDL uses a simple dilution model, assuming full mix in the receiving stream, to calculate the maximum allowable pollutant load that can be discharged and still meet water quality standards during critical low flow in downstream segments such as those with sensitive receptors (e.g., public water supply) or higher water classification. WQBELs are established to ensure that the cumulative mass load from point source discharges does not exceed the maximum allowable load to ensure permit limits are protective of water quality.

### *Minimum Level of Detection*

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is “sufficiently sensitive” when the method’s minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

### *Monitoring Requirements*

CWA Section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on DMRs. The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility’s performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

### *Other Conditions*

### *Schedules of Compliance*

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

### *Schedule(s) of Additional Submittals*

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.

### *Best Management Practices (BMP) for Industrial Facilities*

BMP plans are authorized for inclusion in SPDES permits pursuant to CWA 304(e) and 402 (a)(1) and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.