#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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



Industrial Code:	4953/1422	SPDES Number:	NY0004880
Discharge Class (CL):	03	DEC Number:	4-0103-00016/00020
Toxic Class (TX):	Τ	Effective Date (EDP):	11/01/2017
Major Drainage Basin:	12	Expiration Date (ExDP):	10/31/2022
Sub Drainage Basin:	01	Modification Dates: (EDPM)	11/01/2019
Water Index Number:	H- 239		
Compact Area:			

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.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS								
Name:	Norlite LLC	Attention:	David Maguffin					
Street:	628 Saratoga Street							
City:	Cohoes	State:	NY	Zip Code:	12047			

is authorized to discharge from the facility described below:

FACILITY NAM	IE AND ADDI	RESS															
Name:	Norlite LLC																
Location (C,T,V):	Cohoes (C)									County:	Alba	nny					
Facility Address:	628 Saratoga	Street															
City:	Cohoes						State: NY Zip Code: 12047										
From Outfall No.:	003		at Latitude:	42	0	45	,	14	"	& Longit	ude:	73	0	40	,	20	"
into receiving wat	into receiving waters known as: Salt Kill Creek (H-239)							С	lass:	D							

and (list other Outfalls, Receiving Waters & Water Classifications): See next page

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.

DISCHARGE	DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS								
Mailing Name:	orlite LLC								
Street:	628 Saratoga Street								
City:	Cohoes	State:	NY	Zip Code:	12047				
Responsible Of	ficial or Agent: David Maguffin		Phone:	(518) 235-0	9401				

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 RWE RPA Region2\_NPDES@epa.gov

Permit Administrator:	Kate Kornak
Office Address:	1130 North Westcott Rd. Schenectady, N.Y. 12306
Signature: Kate Korna	Date: 10 / 4 / 2019

OUTFALL	DESCRIPTION	RECEIVING WATER / CLASS	LATITUDE LONGITUDE
003	Quarry Water	Salt Kill Creek (H-239) Class D	42° 45' 20" 73° 42' 22"
004	Shale Fines Leachate and Storm Runoff from Landfill Area	Salt Kill Creek (H-239) Class D	42° 45' 16" 73° 42' 05"
006*	Treated Scrubber Blowdown, Boiler Blowdown, Trunnion Non-Contact Cooling Water, Treated Quarry Water	Mohawk River (H-240) Class C	42° 45' 34" 73° 41' 44"
06A*	Treated Scrubber Blowdown, Boiler Blowdown	Internal	42° 45' 15" 73° 42' 19"
06C*	Treated Outfall 006 Effluent at Manhole by Railroad Tracks	Mohawk River (H-240) Class C	42°45'33.25" 73°42'2.02"

## OUTFALL SUMMARY

\*indicated outfalls expire 4/1/2020

#### PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER	R TYPE		RECEIV	ING WAT	ER		EFFECT			PIRING
for	is cell describes the type of w r discharge. Examples include astewater, storm water, non-c	e process	ess or sanitary waters of the state to which s			star	The date this page starts in effect. (e.g. EDP or EDPM)		The date this page is no longer in effect. (e.g. ExDP)		
PARAMETER	MINIMUM		М	AXIMUM		UN	ITS	SAMPL	E FREQ.	SAN	IPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that m maintained at all instants i		The maximum be exceeded a		2	SU, mg/l,		See	below	S	ee below
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COM	PLIANCE LE	VEL / ML	ACTIC LEVE		U	NITS	SAM FREQU		SAMPLE TYPE
be ef ba of re W St st. be ex ru in ha te ot re as th pr	imit types are defined elow in Note 1. The ffluent limit is developed ased on the more stringent f technology-based limits, equired under the Clean Vater Act, or New York tate water quality andards. The limit has een derived based on kisting assumptions and alles. These assumptions iclude receiving water ardness, pH and emperature; rates of this and ther discharges to the ecciving stream; etc. If ssumptions or rules change he limit may, after due rocess and modification of his permit, change.	assessm use the a method detectio under 44 determin concent present otherwin result is of the m complia for that Monitor than this but shal complia limit. Th	purposes of co ent, the permit approved EPA with the lowes n limit as pron OCFR Part 136 nation of the rations of para in the sample u se specified. If below the det toost sensitive n nce with the p parameter was sing results that s level must be l not be used to nce with the ca his Minimum I heither lowered a modification	ttee shall analytical st possible nulgated o for the meters anless a sample ection limit nethod, ermit limit a chieved. t are lower e reported, o determine alculated Level (ML) I nor raised	Actio Levels monitor requirem as defin below Note 2 which tri additio monitor and per review w exceed	are ing ents, ied in 2, gger nal ing mit vhen	inclu of flo rr temp conce Exa inclu	is can de units ow, pH, nass, erature, or ntration. umples de μg/l, 'd, etc.	Exam include 3/we 2/mon mont quarter! and year monito perio (quart semian annual, c based up calenda unle otherw specifi this Pe	Daily, ek, cly, nth, hly, y, 2/yr ly. All oring ods erly, nual, etc) are oon the r year ess wise ed in	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

1. EFFLUENT LIMIT TYPES:

- a. 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.
- b. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge.
- c. MONTHLY AVG: 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.
- d. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.
- e. 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.
- f. 7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.
- g. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
- 2. ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

# PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Quarry Water	Salt Kill Creek	11/01/2019	10/31/2022

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Daily	Grab	

PARAMETER		EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	Monitor	-	-	MGD	Daily	Estimate	1
Chlorine, Total Residual	Monitor	19	20	-	µg/l	Weekly	Grab	
Solids, Total Suspended	25 210	45 370	-	-	mg/l lb/day	Weekly	Composite	
Solids, Settleable	Monitor	0.1	-	-	ml/l	Weekly	Grab	

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OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
004	Shales Fines Leachate and Storm Runoff from Landfill Area	Salt Kill Creek	11/01/2019	10/31/2022

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Daily	Grab	
Temperature	-	90	°F	Daily	Grab	

PARAMETER		EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	Monitor	-	-	MGD	Daily	Estimate	2
Chlorine, Total Residual	Monitor	19	20	-	µg/l	Daily	Grab	
Copper, Total	Monitor Monitor	18 0.0078	-	-	μg/l lb/day	Daily	Grab	
Solids, Total Suspended	25 11	45 19	-	-	mg/l lb/day	Daily	Composite	
Zinc, Total	Monitor Monitor	300 0.13	-	-	μg/l lb/day	Daily	Grab	
Whole Effluent Toxicity (WET	) Testing							
WET - Acute Invertebrate	-	-	-	0.3	TUa	Quarterly	See footnote	3
WET - Acute Vertebrate	-	-	-	0.3	TUa	Quarterly	See footnote	3

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OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
006	Treated Scrubber Blowdown, Boiler Blowdown, Trunnion Non-Contact Cooling Water and Plant Water	Mohawk River	11/01/2019	04/01/2020

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.5	8.5	SU	Daily	Grab	
Temperature	-	115	°F	Daily	Grab	4, 5
Dissolved Oxygen	7.0	-	mg/l	Daily	Grab	7
Oxidation/Reduction Potential (ORP)	Monitor	Monitor	mV	Continuous	Recorder	6, 7

PARAMETER	EFFLUENT CALCULAT		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	Monitor	-	-	MGD	Continuous	Recorder	
Ammonia (as N) – Summer	1.2 1.2	Monitor Monitor	-	-	mg/l lb/day	Weekly	Grab	7
Ammonia (as N) -Winter	1.6 1.6	Monitor Monitor	-	-	mg/l lb/day	Weekly	Grab	7
BOD <sub>5</sub>	Monitor Monitor	5.0 5.0	-	-	mg/l lb/day	2/Week	Grab	7
Cadmium, Total	Monitor Monitor	2.7 0.0027	-	-	µg/l lb/day	Daily	Grab	7
Chlorides	Monitor Monitor	Monitor Monitor	-	-	mg/l lb/day	Weekly	Grab	
Chlorine, Total Residual	Monitor Monitor	5.0 0.005	20	-	ug/l lb/day	Continuous	Recorder	6, 7
Copper, Total	Monitor Monitor	11 0.011	-	-	μg/l lb/day	Daily	Grab	7
Iron, Total	Monitor Monitor	1000 1.0	-	-	μg/l lb/day	Daily	Grab	7
Lead, Total	Monitor Monitor	6.0 0.0060	-	-	μg/l lb/day	Daily	Grab	7
Mercury, Total	Monitor	50	-	-	ng/l	Daily	Grab	7
Selenium, Total	Monitor Monitor	4.6 0.0046	-	-	μg/l lb/day	Daily	Grab	
Solids, Total Suspended	Monitor Monitor	66 66	-	-	mg/l lb/day	Daily	Grab	
Solids, Total Dissolved	Monitor Monitor	500 500	-	-	mg/l lb/day	Daily	Grab	7
Sulfates	Monitor Monitor	Monitor Monitor	-	-	mg/l lb/day	Weekly	Grab	

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PARAMETER		EFFLUENT LIMIT or CC CALCULATED LEVEL L		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN			
	Monthly Avg	Daily Max									
Whole Effluent Toxicity (WET) Testing											
WET - Acute Invertebrate	-	-	-	0.3	TUa	Quarterly	See footnote	3			
WET - Acute Vertebrate	-	-	-	0.3	TUa	Quarterly	See footnote	3			
WET - Chronic Invertebrate	-	-	-	1.0	TUc	Quarterly	See footnote	3			
WET - Chronic Vertebrate	-	-	-	1.0	TUc	Quarterly	See footnote	3			

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OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
06A	Treated Scrubber Blowdown, Boiler Blowdown, and Non-Contact Trunnion Cooling Water	Internal Outfall, 006	11/01/2019	04/01/2020

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Daily	Grab	

PARAMETER	EFFLUENT CALCULAT		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	0.065	-	-	MGD	Daily	Recorded	
Arsenic, Total	72 Monitor	84 Monitor	-	-	μg/l lb/day	Daily	Grab	
Barium, Total	510 Monitor	1200 Monitor	-	-	μg/l lb/day	Daily	Grab	
Beryllium, Total	370 Monitor	820 Monitor	-	-	μg/l lb/day	Daily	Grab	
Cadmium, Total	26 Monitor	71 Monitor	-	-	μg/l lb/day	Daily	Grab	
Chromium, Total	14 Monitor	25 Monitor	-	-	μg/l lb/day	Daily	Grab	
Copper, Total	14 Monitor	23 Monitor	-	-	μg/l lb/day	Daily	Grab	7
Iron, Total	610 Monitor	1200 Monitor	-	-	μg/l lb/day	Daily	Grab	7
Lead, Total	32 Monitor	57 Monitor	-	-	μg/l lb/day	Daily	Grab	
Mercury, Total	Monitor Monitor	50 Monitor	-	-	ng/l g/day	Daily	Grab	7
Nickel, Total	370 Monitor	550 Monitor	-	-	μg/l lb/day	Daily	Grab	
Silver, Total	8.0 Monitor	13 Monitor	-	-	μg/l lb/day	Daily	Grab	7
Selenium, Total	Monitor Monitor	130 Monitor	-	-	μg/l lb/day	Daily	Grab	7
Solids, Total Suspended	34 18	110 59	-	-	mg/l lb/day	Daily	Grab	
Titanium, Total	22 Monitor	60 Monitor	-	-	μg/l lb/day	Daily	Grab	7
Zinc, Total	54 Monitor	82 Monitor	-	-	μg/l lb/day	Daily	Grab	

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OUTFALL	WASTEWATER TYPE				RECEIVING WATER		EFFECTIV	Έ	EXPIRING
06C	Outfall	006 effluent measu	red at MH by railro	bad	Mohawk		11/01/2019		04/01/2020

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Weekly	Grab	
Temperature	Monitor	90	°F	Monthly	Grab	4

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Sulfide, Total	Monitor Monitor	2.7 0.0030	5.0	-	µg/l lb/day	Weekly	Grab	7
Color (Apparent)	Monitor	Monitor	-	-	PCU	Weekly	Grab	8

#### FOOTNOTES:

- 1. Estimate flow by multiplying pumping rate by the total time elapsed during discharge.
- 2. Estimate flow by using a bucket and stop watch when discharge occurs.

#### 3. Whole Effluent Toxicity (WET) Testing:

<u>Testing Requirements</u> - WET testing shall consist of **Acute and if necessary Chronic**. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing.

The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) for **Outfall 004** is 0:1 for acute. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) for **Outfall 006** is 0:1 for both acute and chronic.

<u>Monitoring Period</u> - WET testing shall be performed at the specified sample frequency during calendar years ending in 8 and 3. Outfall 004 operates intermittently, so the permittee may demonstrate compliance with sampling requirements by performing WET testing for four (4) consecutive quarters during which a discharge occurs.

<u>Reporting</u> - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC50) or (100)/(48 hr EC50) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or  $TUc = (TUa) \times (10)$  when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit, Bureau of Watershed Assessment and Management, 625 Broadway, Fourth Floor, Albany, NY 12233-3502. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC50 or 48 hr EC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

<u>WET Testing Action Level Exceedances</u> - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

- 4. The 115 °F limit applies at outfall 006. The 90 °F limit applies at 06C manhole.
- 5. Plant Water shall be defined as that treated Quarry Water that is discharged through Outfall 006, to aid in the control of the temperature of the entire outfall.
- 6. The addition of sodium hypochlorite or equivalent shall be made whenever the ORP reading is unstable or falling below +100 toward zero or negative.
- 7. See Compliance Schedule on page 16.
- 8. PCU is defined as Platinum-Cobalt Units.

## SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

- 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 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 completed BMP plan was submitted to the Regional Water Engineer on 03/29/2018. 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. All BMP plan revisions (with the exception of SWPPPs see item (5.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. 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 Tables 6-10 of SPDES application Form NY-2C (available at <a href="http://www.dec.ny.gov/docs/permits\_ej\_operations\_pdf/form2c.pdf">http://www.dec.ny.gov/docs/permits\_ej\_operations\_pdf/form2c.pdf</a> ) or that are required to be monitored for by the SPDES permit. Particular attention shall be given to the following substance(s): mercury.
- 4. <u>13 Minimum BMPs:</u> 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. Additional USEPA guidance is available in EPA-833-F-06-026.

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	<ol> <li>Materials/Waste Handling, Storage, &amp; Compatibility</li> </ol>	13. Street Sweeping

5. Inspections and Records

Note that for some facilities, especially those with few employees, some of the above 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.

#### SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES (continued)

- Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to 5. Surface Waters - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 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. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters. The SWPPP shall conform to the New York Standards and Specifications for Erosion and Sediment Control and New York State Stormwater Management Design Manual, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. 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 also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be 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) prior to soil disturbance. Note that submission of a 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, nor are any additional permit fees incurred. SWPPPs must be developed and submitted 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.
- 6. <u>Required Sampling For "Hot Spot" Identification</u> 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 B.A.T. treatment of wastewaters emanating from the segment.

## **MERCURY MINIMIZATION PROGRAM – Industrial Facilities**

1. <u>General</u> - The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP) for those outfalls which have mercury effluent limits. The MMP is required because the permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP is to reduce mercury effluent levels in pursuit of the WQBEL. Note – the mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy *DOW 1.3.10*.

2. <u>MMP Elements</u> - The MMP shall be documented in narrative form and shall include any necessary drawings or maps. 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 shall include an on-going program consisting of: periodic monitoring; an acceptable control strategy which will become enforceable under this permit; and, submission of periodic status reports.

A. <u>Monitoring</u> - The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. Wastewater treatment plant influents and effluents, and other outfalls shall be monitored in accordance with the minimum frequency specified on the mercury permit limits page. Additionally, key locations in the wastewater and/or stormwater collection systems, and known or potential mercury sources, including raw materials, shall be monitored at the above frequency during the first year of the MMP. Monitoring of key locations and known/potential sources may be reduced during subsequent years if downstream outfalls have maintained mercury levels less than 50 ng/l during the previous year. Additional monitoring shall be completed as may be required elsewhere in this permit or upon Department request. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls.

All permit-related wastewater and stormwater mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples should be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate.

B. <u>Control Strategy</u> - An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, which may include, but is not limited to: source identification; replacement of mercury-containing equipment, materials, and products with mercury-free alternatives where environmentally preferable; more stringent control of tributary waste streams; remediation; and/or installation of new or improved treatment facilities. Required monitoring shall also be used, and supplemented as appropriate, to determine the most effective way to operate the wastewater treatment system(s) to ensure effective removal of mercury while maintaining compliance with other permit requirements.

C. <u>Bulk Chemical Evaluation</u> - For chemicals used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee shall obtain a manufacturer's certificate of analysis and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. The permittee shall only use bulk chemicals which contain <10 ppb mercury, if available. This requirement is only applicable to chemicals that would impact wastewater effluent.

C. <u>Annual Status Report</u> - An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year; and, (e) progress toward the goal. The first annual status report is due one year after the permit is modified to include the MMP requirement and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation which shall be available for review by NYSDEC representatives. Copies shall be provided upon request.

3. <u>MMP Modification</u> - The MMP shall be modified whenever: (a) changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or (d) pursuant to a permit modification.

## DISCHARGE NOTIFICATION REQUIREMENTS

- (a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.
- (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:

N.Y.S. PERMITTED DISCHARGE POINT SPDES PERMIT No.: NY		
OUTFALL No. :		
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) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department ). In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained 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.

## DISCHARGE NOTIFICATION REQUIREMENTS (continued)

- (g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:
  - (i) such sign would be inconsistent with any other state or federal statute;
  - (ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;
  - (iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;
  - (iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or
  - (v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.
- (h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

## SCHEDULE OF COMPLIANCE

The permittee shall comply with the following schedule:

Outfall(s)	Parameter(s) Affected & Interim Effluent Limit(s)	Compliance Action to Achieve Final Effluent Limits (see Permit Limits, Levels and Monitoring tables for final limits)	Due Date
006	DO – Monitor Ammonia (as N) - 120 mg/l monthly average BOD5 – Monitor Cadmium – Monitor TRC - 51 ug/l monthly average, 75 ug/l daily maximum Total Copper -0.064 lb/day daily maximum Total Iron - 2.9 lb/day daily maximum Total Lead - 0.019 lb/day daily maximum Total Mercury- 160 ng/l daily maximum TDS - 18,000 mg/l monthly avg; 24,000 mg/l daily max	The permittee is pursuing process upgrades that will eliminate the process discharge. Prior to permanently taking the WWTP equipment and discharge piping out of service and permanently discontinuing the discharge to Outfall 006, the permittee shall prepare and submit the information required by 6 NYCRR Part 750-2.11. Proper notification shall be provided to and necessary approvals obtained for the closure/decommissioning of any piping that requires coordination with other property owners (e.g. railroad or other private property).	November 1, 2019
06A	Total Copper - 120 ug/l, 0.064 lb/day daily max Total Iron - 5.4 mg/l, 2.9 lb/day, daily max Total Mercury- 160 ng/l daily maximum	Complete process upgrades and eliminate process discharge.	December 31, 2019
06C	Total Sulfide – Monitor		

## MONITORING LOCATIONS

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

- Outfall 003: Sampling point shall be at valve above discharge point.
- Outfall 004: Sampling point shall be at manhole located at approximately 42°45'15.48"N, 73°42'8.24"W.
- Internal Outfall 06A: Samples shall be taken post-carbon filters, prior to Tanks A or B.
- Outfall 006: Samples shall be taken from sampling valves for either Tank A or Tank B, depending on treatment plant operations.
- Outfall 06C: Sampling point shall be at manhole located at approximately 42°45'33.25"N, 73°42'2.02"W.

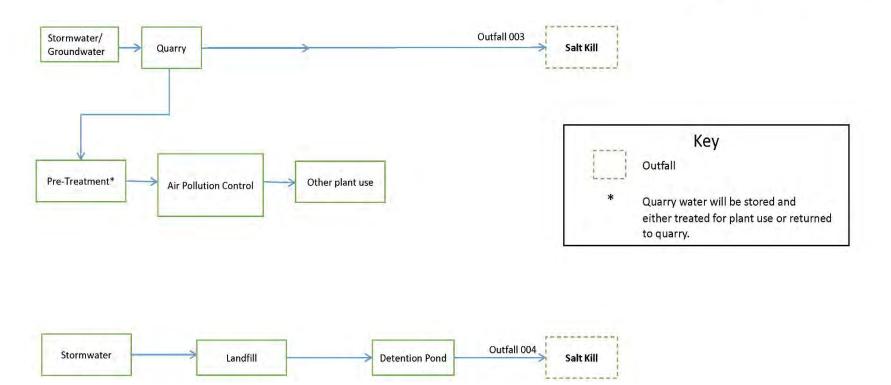
This diagram will no longer be accurate as of April 1, 2020. Refer to Diagram 2.

Outfall 003 Stormwater/ Quarry\* Salt Kill Groundwater Other plant use Pre-Treatment Air Pollution Effluent Outfall Outfall City of Cohoes Wastewater Controllers/Scrubber Outfall 06A Storm Sewer **Treatment Plant** Tank 006 06C Blowdown Mohawk River Kiln Trunnion Non-Contact Cooling Water Key Outfall 06A treatment process Outfall 004 Stormwater Landfill **Detention Pond** Salt Kill \* Treated quarry water is source of plant water

# Water Flow Diagram 1

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## **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 I as follows:.

B.	General Conditions	
2.	1. Duty to comply	6NYCRR Part 750-2.1(e) & 2.4
	2. Duty to reapply	6NYCRR Part 750-1.16(a)
	3. Need to halt or reduce activity not a defense	6NYCRR Part 750-2.1(g)
	4. Duty to mitigate	6NYCRR Part 750-2.7(f)
	5. Permit actions	6NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h)
	6. Property rights	6NYCRR Part 750-2.2(b)
	7. Duty to provide information	6NYCRR Part 750-2.1(i)
	8. Inspection and entry	6NYCRR Part 750-2.1(a) & 2.3
C.	Operation and Maintenance	
	1. Proper Operation & Maintenance	6NYCRR Part 750-2.8
	2. Bypass	6NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7
	3. Upset	6NYCRR Part 750-1.2(a)(94) & 2.8(c)
D. Monitoring and Records		
	1. Monitoring and records	6NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2), 2.5(d) &
		2.5(a)(6)
	2. Signatory requirements	6NYCRR Part 750-1.8 & 2.5(b)
E.	Reporting Requirements	
	1. Reporting requirements	6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17
	2. Anticipated noncompliance	6NYCRR Part 750-2.7(a)
	3. Transfers	6NYCRR Part 750-1.17
	4. Monitoring reports	6NYCRR Part 750-2.5(e)
	5. Compliance schedules	6NYCRR Part 750-1.14(d)
	6. 24-hour reporting	6NYCRR Part 750-2.7(c) & (d)
	7. Other noncompliance	6NYCRR Part 750-2.7(e)
	8. Other information	6NYCRR Part 750-2.1(f)
	9. Additional conditions applicable to a POTW	6NYCRR Part 750-2.9
	<ol> <li>Special reporting requirements for discharges that are not POTWs</li> </ol>	6NYCRR Part 750-2.6
Б		

- F. Planned Changes
  - 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
    - a. The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
    - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
    - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24<sup>th</sup> Floor, New York, NY 10007-1866.

## **GENERAL REQUIREMENTS** continued

- G. Notification Requirement for POTWs
  - 1. All POTWs shall provide adequate notice to the Department and the USEPA of the following:
    - a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
    - b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
    - c. For the purposes of this paragraph, adequate notice shall include information on:
      - i. the quality and quantity of effluent introduced into the POTW, and
      - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

#### H. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

#### I. 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.

#### J. 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 in writing 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 that 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 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 <u>http://www.dec.ny.gov/permits/93245.html</u>.

## **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS**

<ul> <li>A. The monitoring information required by this permit shall be summarized, signed and 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.</li> <li>Also, monitoring information required by this permit shall be summarized and reported by submitting;</li> </ul>				
X (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each <u>1</u> month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.				
(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.				
(if box is checked) a monthly "Wastewater Facility Operation Report" (form 92-15-7) to the: Regional Water Engineer and/or County Health Department or Environmental Control Agency specified below				
Send the <u>original</u> (top sheet) of each DMR page to: Department of Environmental Conservation Division of Water, Bureau of Water Compliance 625 Broadway Albany, New York 12233-3506	Send the <b>first <u>copy</u></b> (second sheet) of each DMR page to: Department of Environmental Conservation Regional Water Engineer, Region 4 1130 North Westcott Road Schenectady, New York 12306-2014			
Phone: (518) 402-8177	Phone: (518) 357-2045			
Send an <b>additional <u>copy</u></b> of each DMR page to: N/A				

- B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. 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.
- D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- E. 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.
- F. 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.