



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

Industrial Code:	9711	SPDES Number:	NY0000973
Discharge Class (CL):	03	DEC Number:	9-0422-00005/00006
Toxic Class (TX):	T	Effective Date (EDP):	07/01/2011
Major Drainage Basin:	01	Expiration Date (ExDP):	06/30/2016
Sub Drainage Basin:	04	Modification Dates: (EDPM)	07/28/2015
Water Index Number:	E-23-33-2-1		
Compact Area:	IJC		

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:	U.S. Department of Energy	Attention:	Bryan C. Bower, Director, U.S. DOE/WVDP	
Street:	1000 Independence Ave SW			
City:	Washington DC	State:		Zip Code: 20585

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name:	West Valley Demonstration Project			
Location (C,T,V):	Ashford (T)	County:	Cattaraugus	
Facility Address:	10282 Rock Springs Road			
City:	West Valley	State:	NY	Zip Code: 14171
From Outfall No.:	001	at Latitude:	42 ° 27 ' 5.6 "	& Longitude: 78 ° 39 ' 2.8 "
into receiving waters known as:	Erdman Brook Segment (D) to Franks Creek (C)			Class: D

and (list other Outfalls, Receiving Waters & Water Classifications)

- 007: Unnamed tributary to Erdman Brook segment (D) to Franks Creek (C)
- 01B: Internal outfall to Erdman Brook Segment (D) to Franks Creek (C) via Outfall 001
- Nineteen (19) Stormwater Outfalls, S04 – S43 are listed on page 2 of this permit

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

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name:	West Valley Demonstration Project			
Street:	10282 Rock Springs Road			
City:	West Valley	State:	NY	Zip Code: 14171-9799
Responsible Official or Agent:	Bryan C. Bower, Director, U.S. DOE/WVDP		Phone:	(716) 942-4287

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
EPA Region II - Michelle Josilo
Eric Wohlers, Cattaraugus Co. Health Department
Erie County Department of Environment and Planning
New York State Energy Research and Development Authority
B. Kirschner, IJC NYSEFC (Class 05 & 07 only)

Permit Administrator: Lisa M. Czechowicz	
Address: 270 Michigan Avenue Buffalo, NY 14203	
Signature: <i>Lisa M. Czechowicz</i>	Date: 7/28/15

Stormwater Outfalls (total number = 19)

No.	Stormwater Outfall [Group No.]	Latitude ° , ' , "	Longitude ° , ' , "	Receiving Water / Class
1	S04 [G1]	42° 27' 15"	78° 39' 16"	Unnamed tributary to Quarry Creek (D)
2	S33 [G2]	42° 27' 15"	78° 39' 15"	
3	S06 [G2]	42° 27' 14"	78° 39' 03"	Unnamed tributary (D) to Franks Creek (C)
4	S09 [G3]	42° 27' 10"	78° 39' 03"	
4*	S09 [G3]	42° 27' 09"	78° 39' 01"	Franks Creek (C)
5	S12 [G3]	42° 27' 02"	78° 39' 08"	Unnamed tributaries to Erdman Brook segment (D) of Franks Creek (C)
6	S14 [G5]	42° 26' 54"	78° 39' 10"	
7	S17 [G5]	42° 26' 52"	78° 39' 08"	
8	S20 [G7]	42° 26' 55"	78° 39' 03"	
9	S27 [G8]	42° 26' 42"	78° 39' 01"	
10	S28 [G5]	42° 26' 41"	78° 39' 01"	NY freshwater wetland/Franks Creek segment
11	S35 [G8]	42° 26' 45"	78° 38' 54"	
12	S34 [G4]	42° 26' 53"	78° 39' 09"	
13	S36 [G6]	42° 26' 26"	78° 38' 45"	Federal Jurisdictional Wetland tributary to unnamed water
14	S37 [G6]	42° 26' 20"	78° 38' 34"	Unnamed tributary to Buttermilk Creek (C)
15	S38 [G6]	42° 26' 21"	78° 38' 32"	
16	S39 [G6]	42° 26' 20"	78° 38' 30"	
17	S41 [G6]	42° 26' 13"	78° 38' 11"	
18	S42 [G6]	42° 26' 06"	78° 37' 54"	
19	S43 [G6]	42° 26' 28"	78° 38' 41"	Federal Jurisdictional Wetland tributary to Buttermilk Creek (C)

*Relocation point of Outfall S09.

Table of Contents
SPDES Permit for West Valley Demonstration Project
Ashford (T), Cattaragus County

<u>SPDES Permit</u>	<u>Page</u>
Facility and Outfalls Information	1
Stormwater Outfalls Information	2
Table of Contents	3
Definitions	4
Effluent Limitations and Monitoring Requirements for Outfalls 001 and 01B	5 – 7
Effluent Limitations and Monitoring Requirements for Outfall 007, Sum of Outfalls 001 & 007, and Outfall 116	8 – 9
Footnotes	10 – 12
Special Requirements for Stormwater Outfalls	13 – 16
Other Special Requirements	17
Best Management Practices Plan	18 – 20
Mercury Minimization Program	21
Discharge Notification Requirements	22
Schedule of Compliance	23
Maps – Facility Location, Outfall Monitoring Locations, and Stormwater Outfall Locations	24 – 28
General Requirements	29 – 30
Recording, Reporting, and additional Monitoring Requirements	31

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	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	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL / ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This Minimum Level (ML) can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	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 NUMBER	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Process Wastewater [liquid waste treatment system, laboratory testing equipment field testing, laundry, miscellaneous decontamination of equipment and facilities, non-contact cooling water, boiler blowdown, contact size reduction, asbestos abatement (filter water), and steam and compressor condensates], water production wastewater, north plateau surface water/groundwater recovery and treatment, NDA groundwater interceptor, miscellaneous contaminated groundwater and stormwater. Batch discharge with 6 ± 2 batches per year; duration for each batch = 7 ± 3 days; and total volume per discharge = 2.1 ± 0.2 MG. Flow except stormwater = 7.6 ± 3.3 MGY; flow including stormwater = 12.6 ± 4.3 MGY; or max. daily flow = 1.0 MGD]	Erdman Brook Segment (D) of Franks Creek (C)	07/01/2011	06/30/2016

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	8.5	SU	1/Batch	Grab	
Dissolved Oxygen	3.0	Monitor	mg/l	2/Batch	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ PQL Daily Max.	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	Monitor			MGD	2/Batch	Continuous	
Oil & Grease	Monitor	15.0			mg/l	1/Batch	Grab	
Solids, Total Suspended	30	45			mg/l	2/Batch	24-hr. comp.	
Solids, Settleable	Monitor	0.3			ml/l	2/Batch	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	2/Batch	Grab	1
BOD ₅	Monitor	10.0			mg/l	2/Batch	24-hr. comp.	
Ammonia (as NH ₃)	1.5	2.1			mg/l	2/Batch	24-hr. comp.	
TKN (as N)	Monitor	Monitor			mg/l	2/Batch	24-hr. comp.	
Nitrate (as N)	Monitor	Monitor			mg/l	1/Batch	24-hr. comp.	
Nitrite (as N)	Monitor	0.1			mg/l	1/Batch	24-hr. comp.	
UOD	Monitor	22.0			mg/l	2/Batch	Calculated	2
Chlorine, Total Residual	Monitor	0.005	0.1		mg/l	1/Batch	Grab	
Aluminum, Total	2.0	4.0			mg/l	1/Batch	24-hr. comp.	
Arsenic, Total Recoverable	Monitor	0.15			mg/l	1/Batch	24-hr. comp.	
Cadmium, Total Recoverable	Monitor	0.002			mg/l	1/Year	24-hr. comp.	

Footnotes: See Pages 10 – 12 of this permit.

Outfall No. 001 - PERMIT LIMITS, LEVELS AND MONITORING - (Continued)

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL / PQL	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Iron, Total	Monitor	Monitor			mg/l	2/Batch	24-hr.comp.	
Chromium, Total Recoverable	Monitor	0.11			mg/l	2/Year	24-hr. comp.	
Chromium, Hexavalent, TR.	Monitor	0.011			mg/l	1/Year	Grab	
Copper, Total Recoverable	Monitor	0.014			mg/l	2/Year	24-hr. comp.	
Cyanide, Amenable to Chlorination	Monitor	0.005			mg/l	2/Year	Grab	
Manganese, Total	Monitor	2.0			mg/l	2/Year	24-hr.comp.	
Lead, Total Recoverable	Monitor	0.006			mg/l	2/Year	24-hr.comp.	
Nickel, Total	Monitor	0.079			mg/l	2/Year	24-hr.comp.	
Selenium, Total Recoverable	Monitor	0.004			mg/l	1/Batch	Grab	
Sulfate	Monitor	Monitor			mg/l	1/Batch	24-hr. comp.	
Sulfide, Dissolved	Monitor	0.008	0.4		mg/l	1/Batch	24-hr. comp.	
Cobalt, Total Recoverable	Monitor	0.005			mg/l	1/Batch	Grab	
Vanadium, Total Recoverable	Monitor	0.014			mg/l	1/Batch	Grab	
Zinc, Total Recoverable	Monitor	0.13			mg/l	2/Year	24-hr. comp.	
Dichlorodifluoromethane	Monitor	0.01			mg/l	1/Year	Grab	
Trichlorofluoromethane	Monitor	0.01			mg/l	1/Year	Grab	
3,3 -Dichlorobenzidine	0.005	0.01			mg/l	1/Year	Grab	
Tributylphosphate	Monitor	0.1			mg/l	1/Year	Grab	
Heptachlor	0.0002	Monitor	0.01		µg/l	2/Year	Grab	
Surfactant (as LAS) – <i>Interim</i>	Monitor	Monitor			mg/l	1/Batch	Grab	3
Surfactant (as LAS) – <i>Final</i>	Monitor	0.04			mg/l	1/Batch	Grab	3
Xylene	Monitor	0.05			mg/l	1/Year	Grab	
2-butanone	Monitor	0.5			mg/l	1/Year	Grab	
Hexachlorobenzene	0.00003	Monitor	0.2		µg/l	1/Year	Grab	4
Mercury, Total	0.7	Monitor	50		ng/l	1/Batch	Grab	4,5,6
Alpha - BHC	0.002	Monitor	0.01		µg/l	1/Year	Grab	4

Footnotes: See Pages 10 – 12 of this permit.

OUTFALL 001 - PERMIT LIMITS, LEVELS AND MONITORING - (Continued)							
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max					
Antimony			1.0	mg/l	1/year	24-hr. comp.	
Barium			0.5	mg/l	1/year	24-hr. comp.	
Boron			2.0	mg/l	2/year	24-hr. comp.	
Bromide			5.0	mg/l	2/year	24-hr. comp.	
Chloroform			0.3	mg/l	1/year	Grab	
Titanium			0.65	mg/l	2/year	24-hr. comp.	
Whole Effluent Toxicity (WET) Testing:							
WET - Acute Invertebrate			0.3	TUa	Quarterly	See footnote	7
WET – Acute Vertebrate			0.3	TUa	Quarterly	See footnote	7
WET – Chronic Invertebrate			1.0	TUc	Quarterly	See footnote	7
WET – Chronic Vertebrate			1.0	TUc	Quarterly	See footnote	7

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER		EFFECTIVE	EXPIRING		
01B	Mercury Pretreatment Process (Internal monitoring point)	Unnamed tributary to Erdman Brook Segment (D) of Franks Creek (C) via Outfall 001		07/01/2011	06/30/2016		
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max					
Flow	Monitor	Monitor		GPD	Weekly	Continuous	
Mercury, Total	Monitor	50		ng/l	2/batch	Grab	4,5,6

Footnotes: See Pages 10 – 12 of this permit.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Sanitary wastewater, noncontact cooling water; boiler blowdown; water production waste (demineralizer regeneration, softener regeneration, utility room sand filter backwash and steam and compressor condensates) and stormwater. [Average daily flow = 0.012 MGD; and Max. daily flow = 0.036 MGD]	Unnamed tributary to Erdman Brook Segment (D) of Franks Creek (C)	07/01/2011	06/30/2016

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.5	8.5	SU	2/Month	Grab	
Dissolved Oxygen	3.0	Monitor	mg/l	2/Month	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ PQL Daily Max.	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Flow	Monitor	Monitor			MGD	Monthly	Continuous	
Oil & Grease	Monitor	15.0			mg/l	2/Month	Grab	
Solids, Total Suspended	30	45			mg/l	2/Month	24-hr. comp.	
Solids, Settleable	Monitor	0.3			ml/l	2/Month	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	2/Month	Grab	1
BOD ₅	Monitor	10.0			mg/l	2/Month	24-hr. comp.	
Ammonia (as NH ₃)	1.49	2.1			mg/l	2/Month	24-hr. comp.	
TKN (as N)	Monitor	Monitor			mg/l	Monthly	24-hr. comp.	
Nitrite (as N)	Monitor	0.1			mg/l	Monthly	24-hr. comp.	
UOD	Monitor	22.0			mg/l	Monthly	Calculated	2
Iron, Total	Monitor	Monitor			mg/l	2/Month	24-hr. comp.	
Chlorine, Total Residual	Monitor	0.005	0.1		mg/l	Monthly	Grab	
Mercury, Total <i>(Interim limit - effective EDP to EDP + 2 yrs)</i>	Monitor	0.7	200		ng/l	Monthly	Grab	4,5,6
Mercury, Total <i>(Final limit - effective EDP + 2 yrs)</i>	Monitor	0.7	50		ng/l	Monthly	Grab	4,5,6
Chloroform			0.20		mg/l	1/year	Grab	

Footnotes: See Pages 10 – 12 of this permit.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No. 007 - (Continued)							
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		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	7
WET – Acute Vertebrate			0.3	TUa	Quarterly	See footnote	7
WET – Chronic Invertebrate			1.0	TUc	Quarterly	See footnote	7
WET – Chronic Vertebrate			1.0	TUc	Quarterly	See footnote	7

OUTFALL No. - Sum of Outfalls 001 and 007							
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max					
Iron, Total (as Net)	Monitor	1.0		mg/l	Monthly	Calculated	8

MONITORING POINT 116 (This is a Pseudo Monitoring Point Located in the Franks Creek)							
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max					
Solids, Total Dissolved	Monitor	500		mg/l	2/Discharge Event	Calculated	1

Foot notes: See Pages 10 – 12 of this permit.

Footnotes:

1. Total Dissolved Solids: The calculated of dissolved solids (C_4) in the Franks Creek at pseudo monitoring point 116 will be performed according to the following formula using flow augmentation concept and should be submitted as part of the DMR.

$$(Q_1)(c_1) + (Q_7)(c_7) + (Q_2)(c_2) + (Q_3)(c_3) = (Q_4)(c_4)$$

where: Q_1 = Flow from Outfall 001, million gallons per day (MGD).
 c_1 = TDS concentration in Outfall 001, mg/l

Q_7 = Flow from Outfall 007, million gallons per day (MGD).
 c_7 = TDS concentration in Outfall 007, mg/l

Q_2 = Flow in Franks Creek, MGD (without Outfall 001), measured at location 006.
 c_2 = TDS concentration in Franks Creek, mg/l (without Outfall 001), measured at location 006.

Q_3 = Flow of augmentation water, MGD
 c_3 = TDS concentration in augmentation water, mg/l

Q_4 = ($Q_1 + Q_7 + Q_2 + Q_3$), MGD (flow in Franks Creek including Outfall 001).
 $c_4 \leq 500$ mg/l (TDS concentration in Franks Creek including Outfall 001).

Prior to discharge of Lagoon 3 (Outfall 001), the permittee shall measure TDS in Lagoon 3 with a composite of grab samples, and measure TDS in its raw water and Franks Creek with grab samples; measure flow in Franks Creek; determine the rate at which Lagoon 3 will be discharged; and calculate the volume of augmentation water required.

Once per day during the discharge of Lagoon 3, the permittee shall monitor flow and TDS in Franks Creek and the raw water supply. As soon as the TDS concentration has been determined, the permittee shall perform the above calculation with the new variables, and adjust Lagoon 3 discharge or augmentation water as necessary.

2. $UOD = 1.5 \times BOD_5 + 4.57 \times TKN$
3. Surfactant: See schedule of compliance page of the permit. The interim limit (monitor only) is effective from **07/01/2011 to 07/01/2013**. The final limit becomes effective on **07/01/2013**.
4. For these parameters, the calculated effluent limits are less than their analytical detection limits; therefore, the compliance levels are set at the practical quantitation limits (PQL). For mercury, the compliance level is based on the draft TOGS (Technical Operational Guidance Series).
5. This is one of the Bioaccumulative Chemicals of Concerns (BCCs) listed in TOGS 1.2.1.
6. Mercury:
- (a) The permittee shall use EPA Methods 1631, *Measurement of Mercury in Water*, (detection limit = 0.5 ng/l) and 1669, *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*, for mercury analysis. When using EPA Method 1631, following provisions are allowed:
- (i) Field Blank - The permittee will be allowed to submit data (both sample results and blank data to be included) when the field blank fails the method specified criteria. The first time this occurs, only the data needs to be submitted. For any subsequent field blank criteria failures, the permittee must conduct an investigation into the source(s) of the contamination and describe steps taken to eliminate the contamination.
- (ii) Non detect for reagent blank - It is acceptable to report the mercury results as non-detect when the reagent blank is < 0.2 ng/l in accordance with the provisions contained in Section 12.4.1 of EPA Method 1631.

(iii) Blank corrected results – The permittee is allowed to use the blank corrected values for mercury as identified in Section 12.4.2 of EPA Method 1631 with a condition that the blank values that are used for the corrections be reported as well.

(b) The permittee shall conduct a mercury minimization program (MMP) outlined in the MMP page of this permit.

7. Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of **Chronic only**. 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 a minimum of two 24-hr composite samples with one renewal 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) is 0:1 for acute, and 0:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed at the quarterly sample frequency **beginning in January 2012 and lasting for a period of one full year. The permittee shall repeat the quarterly WET testing every 5th year thereafter. For batch discharges, such as Outfall 001, the WET testing should be conducted on a quarterly basis during the years listed above. In case batch discharges do not occur in each calendar quarter, the permittee should conduct four WET testing for that year.**

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: $TU_a = (100)/(48 \text{ hr LC50})$ or $(100)/(48 \text{ hr EC50})$ (note that Acute data is generated by both Acute and Chronic testing) and $TU_c = (100)/(NOEC)$ when Chronic testing has been performed or $TU_c = (TU_a) \times (10)$ 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 TU_c . Report a TU_a 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. A summary page of the test results for the invertebrate and vertebrate species indicating TU_a , 48 hr LC50 or 48 hr EC50 for Acute tests and/or TU_c , NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - 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.

8. Total Iron Calculation at Sum of Outfalls 001 and 007: Net iron limit is applicable.

The following procedures will be used to calculate the net value and should be submitted as part of the DMR.

$$\text{Outfall 001: } M_1 = \left(\frac{X_1 + X_2}{2} \right) V_1$$

M_1 = mass of iron discharged from Outfall 001, milligrams per month.

x_1, x_2 = iron concentration (mg/l) in each of at least two samples from Outfall 001*

V_1 = volume of Outfall 001 discharge, liters per month, as calculated by (Q) (T), where Q = average discharge rate calculated from daily weir readings and T = total time of discharge.

$$\text{Outfall 007: } M_7 = \left(\frac{X_1 + X_2}{2} \right) V_7$$

M_7 = mass of iron discharged from Outfall 007, milligrams per month.

x_1, x_2 = iron concentration (mg/l) in two samples from Outfall 007*.

V_7 = total volume of Outfall 007, liters per month, as measured by flow totalizer recordings.

$$\text{Raw Water: } M_{RW} = \left(\frac{X_1 + X_2 + X_3 + X_4}{4} \right) V_{RW}$$

M_{RW} = mass of iron entering the potable water treatment plant, milligrams per month.

x_1, x_2, x_3, x_4 = iron concentration in each of four sample of raw water*.

V_{RW} = total volume of raw water entering the potable water treatment plant per month as measured by flow totalizer recordings.

$$\text{IRON DISCHARGE CONCENTRATION (mg / l)} = \frac{M_1 + M_7 - M_{RW}}{V_1 + V_7}$$

* Where more than the minimum number of iron samples are collected, all measured values shall be factored into the calculation.

Special Requirements for Stormwater Outfalls:

1. Stormwater Outfalls and their grouping are listed in the following Table A: Stormwater Outfalls

Group	Stormwater Outfall	Description of Stormwater	
		Stormwater runoff from following activities	Construction activity
Group 1	S04	Surface discharge of non-storm, non-process, non-cooling water sources ⁽¹⁾ and stormwater associated with industrial activity and construction activity ⁽²⁾	(2A) + (2B) + (2C)
Group 2	S06; S33	Same as Group 1	(2A) +(2B) +(2C)
Group 3	S09; S12	Same as Group 1	(2A) +(2B) +(2C)
Group 4	S34	Same as Group 1	(2A) +(2B) +(2C)
Group 5	S14; S17; S28	Same as Group 1	(2A) +(2B) +(2C)
Group 6	S36; S37; S38; S39; S41; S42, S43	Same as Group 1	(2A) +(2B) +(2C)
Group 7	S20	Same as Group 1+ storm water runoff from storm water outfalls W01 and W06 of NYS Licensed Disposal Ares, NY 026 9271).	(2B) + (2C) + (2D)
Group 8	S27; S35	Same as Group 1	(2A) + (2B) + (2C)

Notes:

- (1) Non-process, non-storm, non-cooling water sources, include air conditioning condensate, fire hydrant flushings, testing of fire fighting equipment (water only fire suppression), potable water sources including water flushings, vegetation watering, uncontaminated inflow and infiltration, leakage from raw water conveyance system, routine external building washdown and vehicle washing which does not use detergents or other compounds, pavement washwaters where spill or leaks of toxic or hazardous materials, have not occurred or where the spill material has been removed, springs, foundation and footing drains where flows are not contaminated with process materials or wastes.
- (2) Construction activity is listed below (Also refer to Attachment 7-3 of the NY2C SPDES permit application, September 25, 2008)
 - (2A) Potential future structure (e.g. buildings, tanks, treatment units) demolition, removal, and associated restoration, including soil regrading, filling, and erosion control establishment. Ultimate acreage of soil disturbance will be three acres or less depending upon the site closure alternative selected for implementation. Demolition work will not initiate until 2009 or later, if all; (run-off from these activities is potentially tributary to Outfalls S04, S06, S09, S12, S14, S17, S20, S27, S28, S33, S34, & S35);
 - (2B) Perpetual, routine, and preventive maintenance of infrastructure, including repair, reconstruction, rehabilitation, and replacement of buildings, fences, sheds, shelters, site service roads, road embankments, parking areas, equipment storage hardstands, potable water, sewer and other utility (electrical, fire, etc.) service lines and structures (e.g. culverts, access chambers, pits, tanks, etc.), and storm water conveyance system (including culverts, inlet chambers, and earthen swales), pile storage of spoils (e.g. sediment and debris from storm water conveyance cleaning) and soil resulting from perpetual maintenance activities), and soil regrading and stabilization activities to control erosion. Total soil disturbance at any given time from these activities is
 - (a) < 0.5 acres (for stormwater outfalls S04, S06, S09, S12, S14, S17, S27, S28, S33, & S41),
 - (b) < 0.2 acres (for stormwater outfalls S36, S37, S38, S39, S41, S42, S43 and S35),
 - (c) < 1 acre (for stormwater outfall S34), and
 - (d) < 2 acres for stormwater outfall S20.
 - (2C) Miscellaneous, relatively minor activities, including installation or removal of environmental monitoring or security equipment; and [runoff from these activities is potentially tributary to same outfall list in item no. (2B) above.]; and
 - (2D) The Interim Measure (IM) Work Plan – Nuclear Regulatory Commission-Licensed Disposal Area Cap and Groundwater Barrier at the WVDP for S20.

Table B – Sampling Parameters for the Stormwater (SW) Outfalls using Rotational Monitoring Sequence

Group No.	SW Outfall	Monitoring parameters and compliance limits *			Rotational Monitoring Sequence
		Group A	Group B	Group C	
1	S04	pH *1 Oil & Grease *2 BOD ₅ TSS TDS Phosphorus, T.	Aluminum Iron Copper (TR) Lead (TR) Zinc (TR)	Total Nitrogen (as N), TKN Nitrate, Nitrogen (as N) Nitrite, Nitrogen (as N) Ammonia, Nitrogen (as NH ₃) Cadmium (TR) Chromium (TR), Chromium (+6) (TR) Selenium (TR), Vanadium (TR)	<p><u>Requirements:</u></p> <p>a) The permittee shall conduct semi-annual (2 times per year) monitoring on the stormwater outfalls.</p> <p>b) Semi-annual monitoring shall be equally distributed among the SW outfalls within SW Group. For SW groups containing more than two (2) outfalls within each group, outfalls should be sampled in a rotational sequence to sample at least one (1) outfall in each group during each semi-annual, monitoring interval. The outfall rotational monitoring sequence in each group shall be repeated until all outfalls in that group have been sampled. For Groups with only one outfall, semi-annual monitoring shall be conducted at that outfall.</p> <p>c) The permittee shall attempt to select one storm event during the period from January to June and another storm event from July to December. The stormwater reports shall be appended to the June and December DMR and sampling data reported on the June and December DMR.</p>
2	S06, S33	Same as Group 1	Same as Group 1	Surfactant (as LAS)	
3	S09 S12	Same as Group 1	Same as Group 1	Total Nitrogen (as N), TKN Nitrate, Nitrogen (as N) Nitrite, Nitrogen (as N) Ammonia, Nitrogen (as NH ₃) Alpha-BHC, Mercury (T) (*3)	
4	S34	Same as Group 1	Same as Group 1	Surfactant (as LAS)	
5	S14 S17 S28	Same as Group 1	Same as Group 1	Total Nitrogen (as N), TKN Nitrate, Nitrogen (as N) Nitrite, Nitrogen (as N) Ammonia, Nitrogen (as NH ₃) Sulfide, Surfactant (as LAS), Vanadium (TR), Settleable Solids	
6	S36 S37 S38 S39 S41 S42 S43 (*4)	Same as Group 1	Same as Group 1 except for S43 that the permittee shall sample and report Lead (TR) semi-annually.	Same as Group 5	
7	S20	Same as Group 1	Same as Group 1	Total Nitrogen (as N), TKN Nitrate, Nitrogen (as N) Nitrite, Nitrogen (as N) Ammonia, Nitrogen (as NH ₃) Sulfide, Surfactant (as LAS)	
8	S27 S35	Same as Group 1	Same as Group 1	Total Nitrogen (as N), TKN Nitrate, Nitrogen (as N) Nitrite, Nitrogen (as N) Ammonia, Nitrogen (as NH ₃) Surfactant (as LAS)	

Notes:

- *1. Compliance limit - pH data shall be reported from a representative Outfall from each group and from an on-site rain gauge during the storm water discharge sampling event.
- *2. Compliance limit -Oil & Grease shall not exceed 15 mg/l.
- *3. Mercury - Footnote 6 on Pages 10 – 11 of this permit shall also apply. Group 3 (S09 & S12) shall be part of MMP.
- *4. S43 receives runoff from Live Fire Range. Lead from Lead Bullets is a concern at this stormwater outfall. The permittee shall use the lead discharge effluent limit at Outfall 001 as guideline for lead concentration at this S43. In case lead concentration at S43 exceeds lead effluent limit at outfall 001, the permittee shall update mitigation measures and modify the *Best Management Practices (BMP) Plan for the Management Lead Bullets at the Live Fire Ranges (WVDP-469)*, dated August 2008, to reduce the lead concentration in the runoff S43. The permittee shall submit the amended pages of the BMP/SWPP Plan to the Regional Water Engineer of Region 9 within 30 days from the date that the permittee receives sampling data which shows lead concentration higher than the effluent limit at Outfall 001. Semi-annual sampling shall be grab only.

Special Requirements for Stormwater Outfalls (continued):

2. The permittee shall conduct semi-annual (2 times per year) monitoring on the stormwater outfalls. The permittee shall attempt to select one storm event during the period from January to June and another storm event from July to December.
3. For each storm event, the permittee shall conduct:
 - (i) Flow monitoring: The permittee shall collect samples from a storm event meeting the following criteria:
 - a. Greater than 0.1 inches;
 - b. At least 72 hours from the previously measurable (> 0.1 inches rainfall) storm event; and
 - c. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

Note: Samples taken during storm events that do not meet the above criteria are acceptable, but must be accompanied by an explanation.

The permittee shall obtain the following information for each storm event sampled:

- a. Date of storm event;
- b. Duration of storm event (in minutes);
- c. Total rainfall during the storm event (in inches);
- d. Number of hours between the storm event sampled and the end of the previous measurable (> 0.1 inch rainfall) storm event;
- e. Total flow from the rain event (in gallons); max. flow rate during the storm event; and
- f. A description of the method of flow measurement.

(ii) Sampling:

Minimum sampling parameters at stormwater outfalls are listed in Table B.

For pH, oil & grease and Mercury, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used.

For all other sampling parameters listed in Table B, both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

4. Reporting:

The permittee shall summarize, analyze and report the stormwater monitoring data to the address listed in the Recording, Reporting and additional Monitoring Requirement page of this permit. The stormwater reports will be due no later than the 28th day of the month following the end of each reporting period with the regular DMR. This means that the stormwater reports should be appended to the June and December DMR.

Special Requirements for Stormwater Outfalls: (Continued)**5. Prohibition of non-storm water discharges:**

Discharges of material other than storm water must be in compliance with the provisions contained in the non-storm water portions of this permit. However, the following non-storm water discharges may be authorized by this permit provided that the non-storm water component of the discharge is in compliance with the practices and provisions developed in the BMP Plans as required by this permit: discharges from fire fighting activities; fire hydrant flushing; potable water sources including waterline flushing; irrigation drainage; lawn watering; routine external building washdown which does not use detergents or other compounds; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air-conditioning condensate; spring; uncontaminated ground water seepage; and foundation or footing drains where flows are not contaminated with process materials such as solvents.

6. Storm water pollution prevention plans (SWPPPs):

Stormwater pollution prevention plans shall be prepared in accordance with good engineering practices and in accordance with the factors outlined in 40 CFR 125.3(d)(2) or (3) as appropriate, and NYSDEC SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-06-002). The SWPPPs can be combined into one document with the Best Management Practices (BMP) Plan. SWPPP related to the stormwater discharges from construction activity should follow requirements outlined in the most recent version of the "General Permit for Stormwater Discharges from Construction Activity." Note that the current version of this General Permit No. is GP-0-10-001."

The SWPPPs shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.

The permittee has submitted the SWPPPs on May 18, 2005.

Other Special Requirements:

1. For those parameters where more than one (1) set of samples is required per discharge event under the Effluent Limitations and Monitoring Requirements for outfall 001, one (1) set of samples shall be taken at Outfall 001 approximately at the beginning of the discharge event and one (1) set of samples shall be taken prior to the discontinuance of the discharge event.
2. The quantities or concentrations of radionuclides in a United State's Department of Energy's (USDOE) discharge are subject to the requirements in the USDOE Order Nos. 450.1 (Environmental Protection Program) and 5400.5 (Radiation Protection of the Public and the Environment).
3. Prior to the discharge of any DOE source subject to the requirements specified in the United States Department of Energy's (USDOE) Order No. 5400.5, DOE shall submit to the Department's regional office results of the radiological analysis that pre-qualified the source for discharge. Radiological analysis submitted to the Department shall be in a tabular format that will include in adjacent column DOE radiological effluent limitations for comparison purposes.
4. A complete NDA - Trench Water characteristic analysis shall be conducted and submitted to the Department within 6 months of the commencement of operation of the NDA - Treatment Facilities. All analysis listed in part V of Form 2C shall be performed.
5. The permittee is allowed to discharge construction wastewaters up to 7.5% of the Lagoon #2 capacity (2,500,000 gal) under the condition that the substances in the construction wastewaters are covered by this permit. Any construction wastewater that has substances not covered by this permit should receive prior approval for discharge from NYSDEC.
6. Submit a copy of each of the Annual Environmental Monitoring Report for the West Valley Demonstration Project to Regional Water Engineer of the NYSDEC Region 9 Buffalo Office and Section Chief, Wastewater Permits – West Section, Bureau of Water Permits, 625 Broadway, and Albany, New York 12233-3503.

SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

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 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 permittee has submitted the BMP plan to the Regional Water Engineer on August 11, 1994. 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 (4.B.) 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 http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit. **Particular attention shall be given to the following substance:**

Bioaccumulation Chemicals of Concern and Lead Bullets at the Live Fire Ranges [Note: There is a BMP (WVDP-469 for Management of Lead Bullets), dated August 2008]

4. **A. 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 the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order # PB 92235969). 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 | | |

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)

B. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to 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.

5. **Facilities with Petroleum [NYSDEC Permit No. 9-008885] and/or Chemical [NYSDEC Permit No. 9-000158] Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 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 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 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.

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 it may be discharged. Otherwise it must either be disposed of in an on site 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.

SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES (Continued)

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 fire fighting 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 (EPA method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (EPA method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD5 or toxicity testing. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

MERCURY MINIMIZATION PROGRAM – Outfalls 001, 01B, 007 and SW Group 3 (S09 & S12)

1. **General** - The permittee shall implement and maintain the Mercury Minimization Program (MMP), submitted to the Department on March 3, 2014, for those outfalls which have mercury effluent limits. The MMP is required because the 50 ng/L 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. **MMP Elements** - 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. **Monitoring** - 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 must 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. **Control Strategy** - 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. **Annual Status Report** - 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, **by July 1**, 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. 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. **MMP Modification** - 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) 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 within 90 days of the Effective Date of this Modification.
- (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 sign 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 signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.
- (h) Following Outfalls have received NYSDEC waiver decision on February 28, 1998:

Outfall No.	Waiver Decision	Reason
001 & 007	Granted.	These Outfalls are fenced and patrolled areas, and are inaccessible to the public.

SCHEDULE OF COMPLIANCE

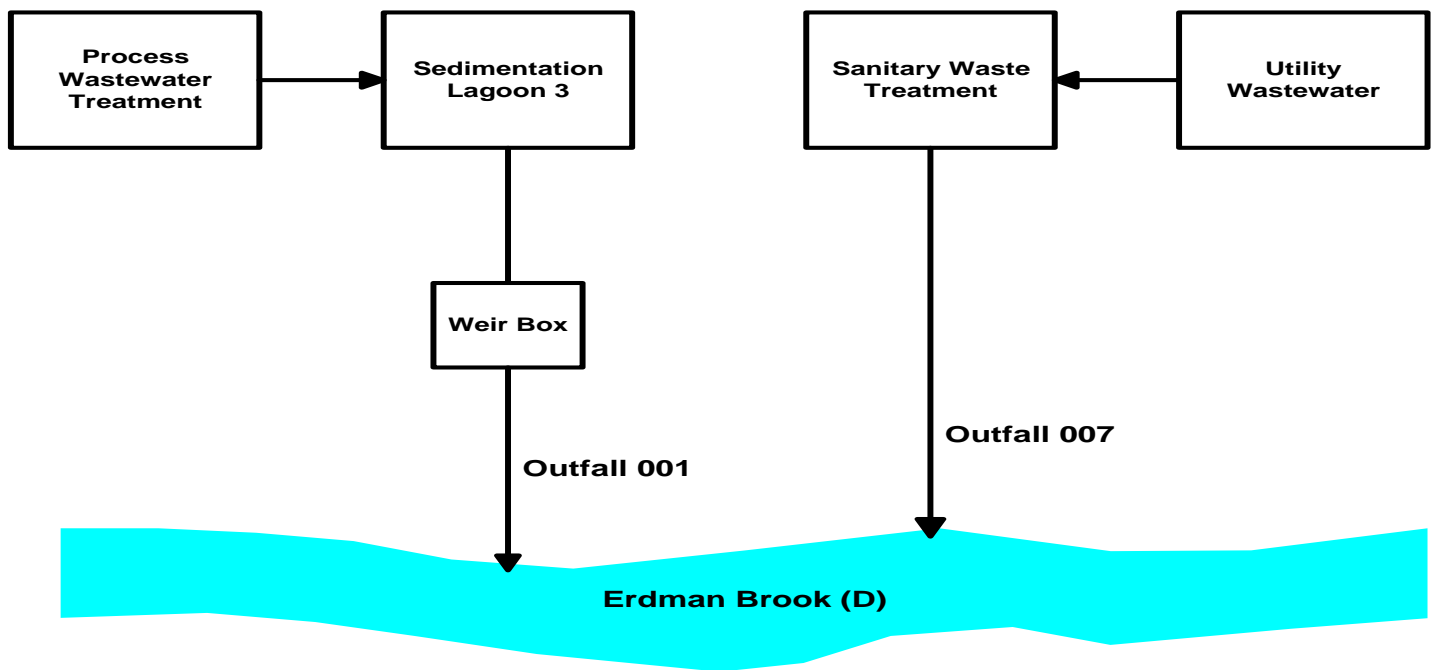
a) The permittee shall comply with the following schedule:

Outfall Number(s)	Compliance Action	Due Date
S09	Stormwater Outfall S09 Relocation: The permittee shall submit a 100% design for the construction of the stormwater Outfall S09 relocation. The design and construction shall follow the Special Requirements for Stormwater Outfalls on page 13 of this permit, and the requirements set in the New York State Standards and Specifications for Erosion and Sediment Control. The 100% design shall include a proposed implementation schedule of the Outfall S09 relocation.	Completed 06/02/2015
Appropriate Outfalls	Paraquat Dichloride - Herbicide (Gramoxone Extra of ZENECA Ag Products Inc.) Sampling Program: Permittee shall take one grab sample from each stormwater outfalls and regular outfalls which contain areas with Herbicide application and analyze for Paraquat Dichloride (composition of Gramoxone Extra). EPA Method 549.2 (HPLC-UV) shall be used to analyze Paraquat Dichloride. Samples shall be collected at the reasonable time after the Herbicide application and sampling results shall be summarized in a report with Herbicide application information included.	Application of Herbicide + 60 days
The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."		

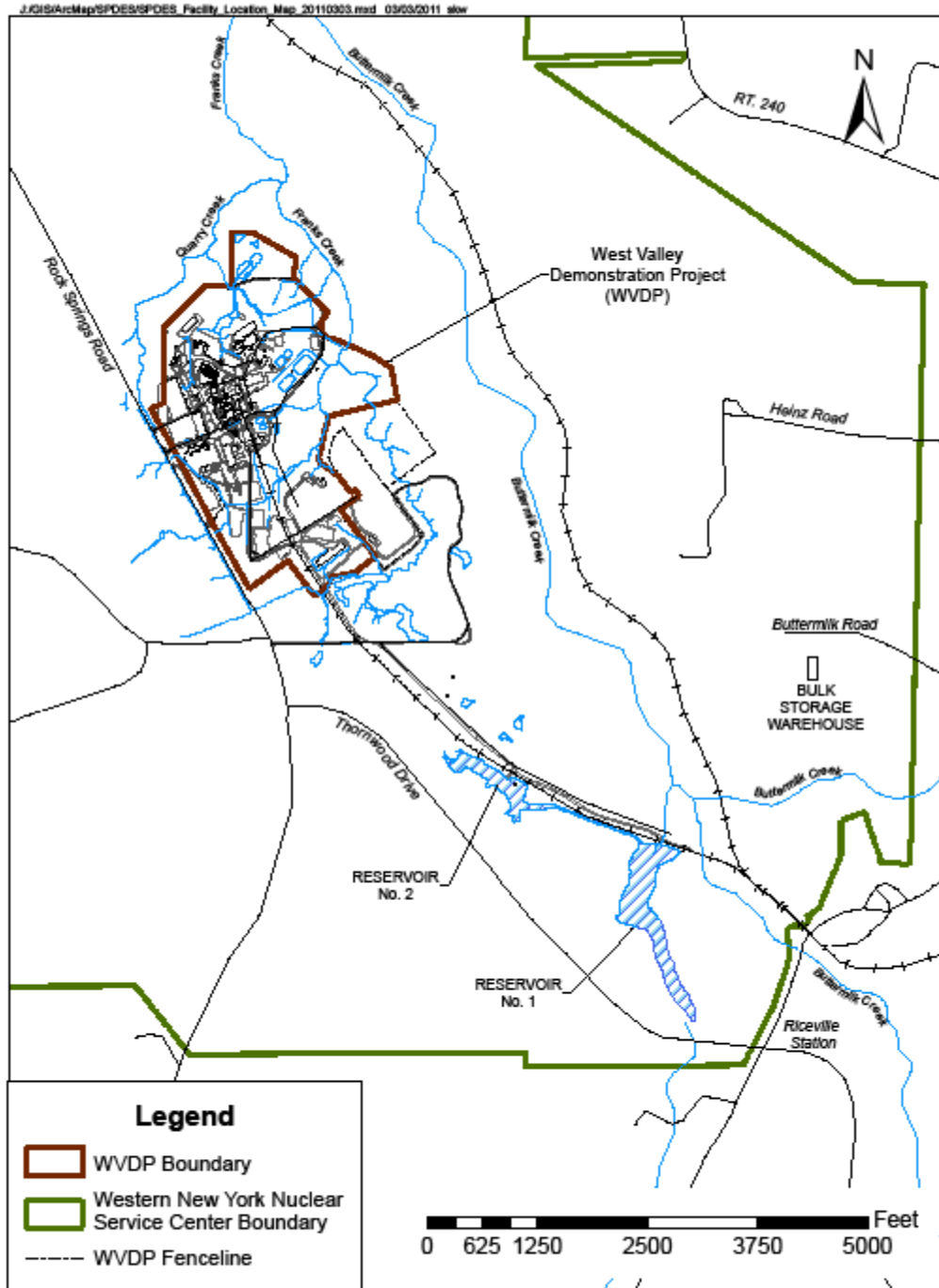
- b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. A description or any factors which tend to explain or mitigate the non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

MONITORING LOCATIONS

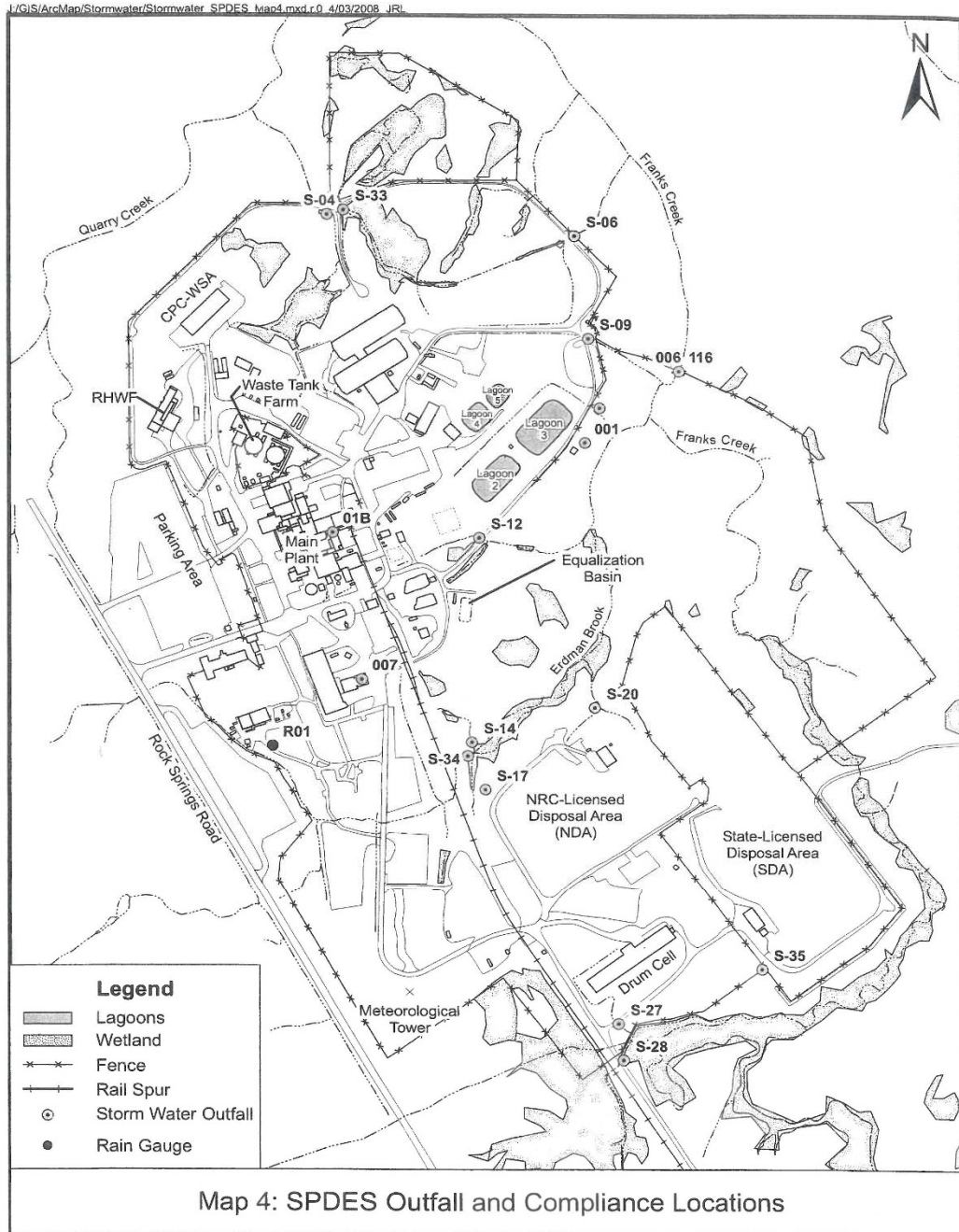
The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



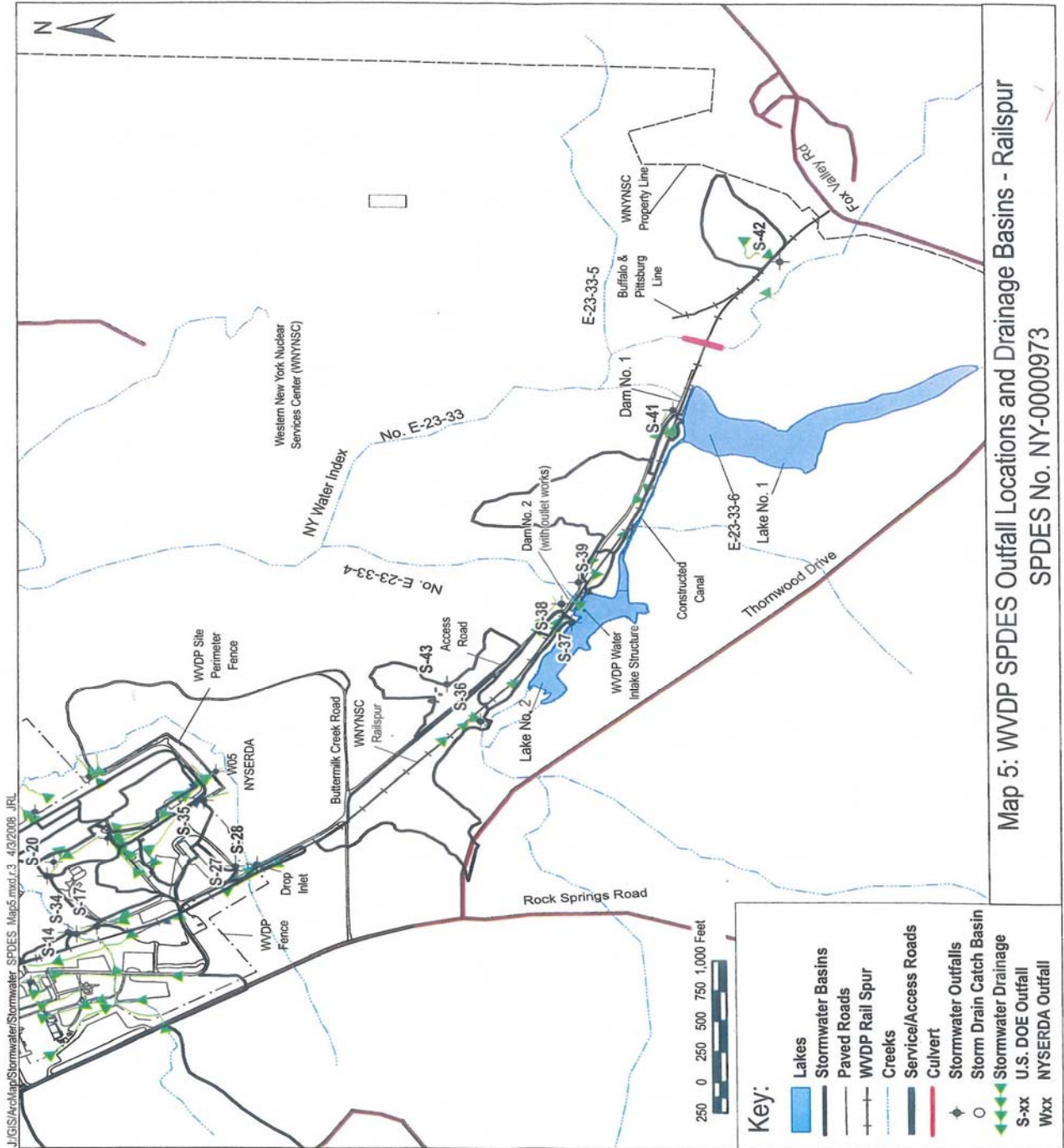
Facility Location Map



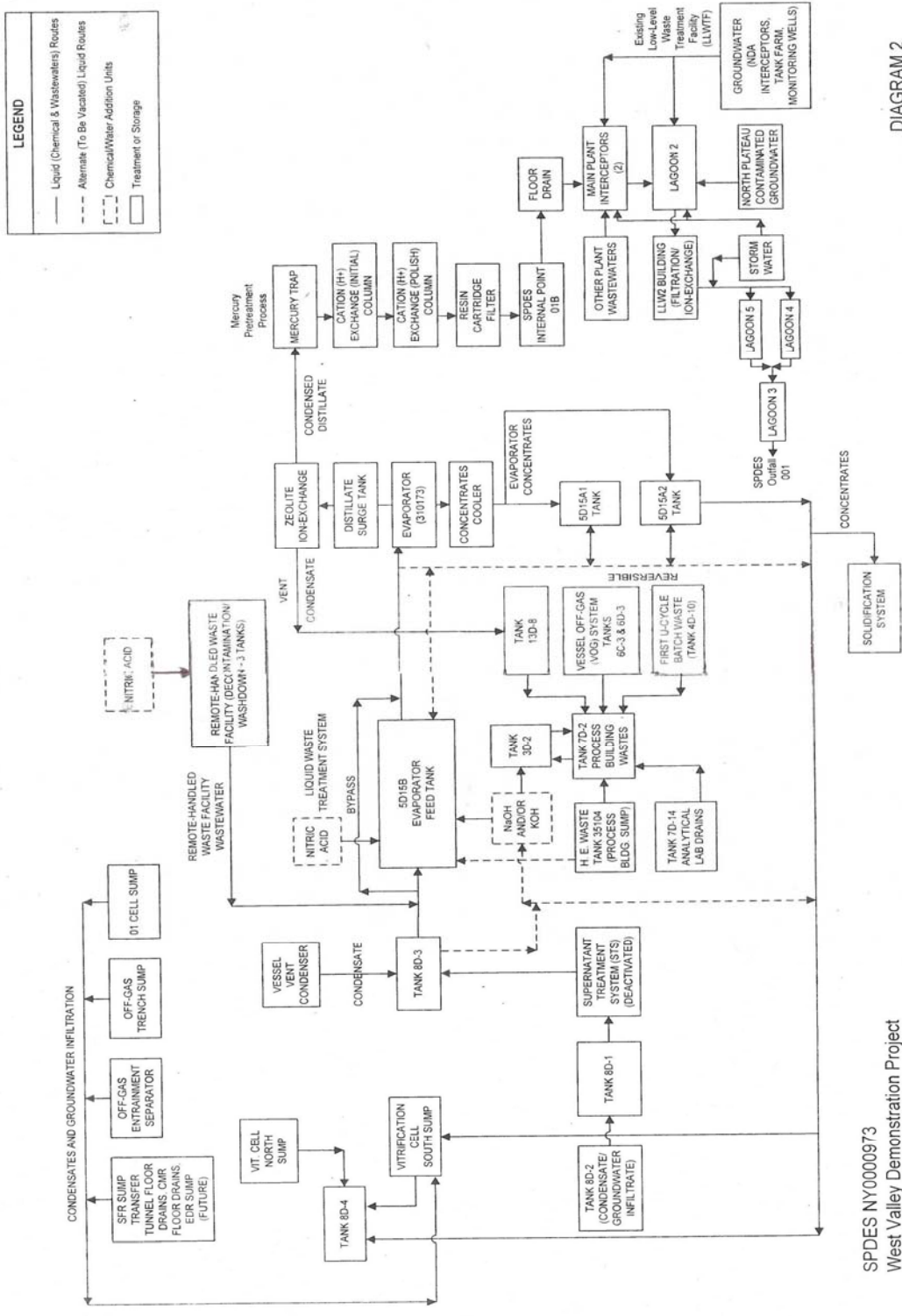
Outfall Locations



Stormwater Outfall Locations



Liquid Waste Treatment System (LWTS) Source Flow Diagram



SPDES NY0000973
 West Valley Demonstration Project
 LWTS Source Flow Diagram.vsd

DIAGRAM 2
 REVISION B
 AUGUST 2008

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
- | | |
|--|---|
| 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 |
| 10. Special reporting requirements for discharges that are not POTWs | 6NYCRR Part 750-2.6 |
- 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, 24th 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 <http://www.dec.ny.gov/permits/93245.html>.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- 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. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 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 **original** (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

Phone: (518) 402-8177

Send an **additional copy** of each DMR page to:

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 9
270 Michigan Ave
Buffalo, New York 14203

Phone: (716) 851-7070

- 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.