



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

Industrial Code: 4911
 Discharge Class (CL): 03
 Toxic Class (TX): T
 Major Drainage Basin: 17
 Sub Drainage Basin: 02
 Water Index Number: ER
 Compact Area: IEC

SPDES Number: NY-0005118
 DEC Number: 2-6301-00185/00007
 Effective Date (EDP): 03/01/07
 Expiration Date (ExPD): 02/29/2012
 Modification Dates: EDPM

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: Astoria Generating Company, L.P. Attention: Natalie Dubanowitz
 Street: 18-01 20th Avenue
 City: Astoria State: NY Zip Code: 11105-4271

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Astoria Generating Station
 Location (C,T,V): Astoria County: Queens
 Facility Address: 18-01 20th Avenue
 City: Long Island City State: NY Zip Code: 11105
 NYTM -E: 592.5 NYTM - N: 4515.7
 From Outfall No.: 001 at Latitude: 40 ° 47 ' 20 " & Longitude: 73 ° 54 ' 50 "
 into receiving waters known as: East River Class: I

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

- 01A - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01B - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01C - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01D - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01E - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01F - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 01G - East River via Outfall 001 Class I LAT 40 47 20 LON 73 54 50
- 002 and 02A (via 002) East River Class I LAT 40 47 20 LON 73 54 50
- A10 - East River Class I LAT 40 47 20 LON 73 54 50
- TR1 - Groundwater GA LAT 40 47 20 LON 73 54 50

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Astoria Generating Station
 Street: 18-01 20th Avenue
 City: Long Island City State: NY Zip Code: 11105
 Responsible Official or Agent: Robert Skladony Phone: (718) 204-3970

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:

Permit Coordinator, BWP
 RPA
 RWE
 EPA Region 2 - Michelle Josilo
 IEC

Permit Administrator: William R. Adriance	
Address: 625 Broadway Albany, NY 12233	
Signature:	Date:

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.			
PARAMETER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (PQL)	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 standards, 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 analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Type I or Type II Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE.: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.

DAILY MAX.: The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.

DAILY AVG or 30 DAY ARITHMETIC MEAN (30 day average): The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.

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.

7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.

RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

Note 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. **TYPE I:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level. **TYPE II:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

INTERIM⁶ PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Condenser Cooling and Service Water	East River	EDPM	Footnote 6

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Instantaneous	

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	Monitor	Monitor			MGD	Continuous	Pump Log	
Discharge Temperature	NA	94			°F	Continuous	Recorder	1,5
Intake-Discharge Temperature Difference	NA	16.5			°F	Continuous	Recorder	1,5
Total Residual Chlorine	NA	0.2			mg/l	3/week	Grab	2
Net Rate Addition of Heat	NA	7.35x10 ⁹			BTU/hr	Monthly	Calculated	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Boiler Blowdown	East River via Outfall 001	05/06/03	Footnote 6

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Total Suspended Solids	30	100			mg/l	2/Month	Grab	
Oil & Grease	NA	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	Equipment & Floor Drains, including condensate from Lube Oil System	East River via Outfall 001	05/06/03	Footnote a

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	30	100			mg/l	Weekly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01C	Stormwater - Roof Drains Main Building	East River via Outfall 001	05/06/03	Footnote 6

NO MONITORING REQUIRED

Footnotes: See page 5

INTERIM⁶ PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE				RECEIVING WATER	EFFECTIVE	EXPIRING	
01D	Reverse Osmosis System Reject Water				East River via Outfall 001	05/06/03	Footnote 6	
PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	

OUTFALL No.	WASTEWATER TYPE				RECEIVING WATER	EFFECTIVE	EXPIRING	
002	Stormwater Runoff - Astoria Oil Storage				East River	05/06/03	Footnote 6	
PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	Monthly	Grab	
Benzene			0.1		mg/l	Quarterly	Grab	
Toluene			0.1		mg/l	Quarterly	Grab	
Xylenes			0.1		mg/l	Quarterly	Grab	
Ethylbenzene			0.1		mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE				RECEIVING WATER	EFFECTIVE	EXPIRING	
02A	Hydro Tank Test Water				East River (Via 002)	05/06/03	Footnote 6	
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)		
pH	6.0	9.0	SU	Each Discharge	Grab	3		
PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Each Discharge	Instantaneous	3
Oil & Grease	NA	15			mg/l	Each Discharge	Grab(s)	3
Benzene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Toluene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Xylenes (Total)	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Ethylbenzene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Chlorine, Total Residual	NA	0.20			mg/l	Each Discharge	Grab(s)	3, 4

Footnotes: See page 5

A. Footnotes (INTERIM AND FINAL):

1 These limitations may be exceeded during periods when Units 3 and 4 condensing units are not operating or

operating with only one circulating water pump (per unit), due to pump breakdown or routine maintenance. In the event of pump breakdown, the permittee shall take corrective action as soon as possible. Where possible, routine pump maintenance resulting in these limitations being exceeded, should be avoided from June through September. The permittee shall indicate on the Discharge Report Form: (1) which circulating pumps, if any, were not in operation, (2) the dates such pumps were not operating, (3) the reason(s) for such pumps not operating, and (4) the period(s) (dates and times) during which these limitations were exceeded. In no case shall these limitations be exceeded more than 5% of the time during any 365 day period, except when flows indicate predominately cooling tower only operations. During those operating conditions when the discharge is predominately cooling tower blowdown, a maximum discharge limit of 96°F shall be allowed, and the limits for Intake-Discharge Temperature Difference and Net Rate Addition of Heat shall not apply.

- 2 Chlorine measurement frequency - if there is no chlorination, no sampling is necessary for chlorine.
 - 3 samples per week with 4 equally spaced grab samples per event.
 - Sampling shall occur during chlorination of the unit with the maximum feed rate.

3. HYDRO TEST WATER

Tanks being hydrostatically tested must be free of product and cleaned. The Regional Water Engineer must be informed at least two business days prior to the discharge of tank test water.

Any discharge of tank test water must be done under the direct supervision of plant personnel. Samples from the tank must be taken prior to discharge from various levels within the tank (top, middle and bottom). If sampling shows conformance with effluent limitations, discharge may be initiated. If effluent limitations are not attained, additional measures must be implemented to attain compliance prior to initiation of discharge.

A visual check of the discharge must be made for the presence of oil and floating substance. Data associated with tank test water shall be kept, along with the log of visual observations, for a period of three years and be made available to department personnel upon request.

The discharge of tank test water must be done in a manner that minimizes erosion of soil or sediment and does not cause flooding in the area of discharge. It must be done in a manner that minimizes the impact on the fisheries.

4. Only required when chlorinated water is used in tank testing.
5. The temperature samples for Outfall 001 shall be collected prior to discharge from the mixing sump (for the combined discharge from Sub-Outfalls 01A, 01G and 01F).
6. The Interim Permit Limits and Requirements shall expire 180 days from the first firing of fuel in Phase II of the Repowering. See Additional Final Requirements for Notification requirement.
7. The Final Permit Limits and Requirements shall become effective 180 days from the first firing of fuel in Phase II of the Repowering (unless stated otherwise). See Final Additional Requirements for Notification requirement.

Prohibitions:

8. No foaming agents are to be used tributary to outfall 002.
9. No industrial or manufacturing process wastewater effluents are permitted with the exception of approved equipment cleaning wastewater. Vehicle washing operations are not permitted. Vehicles may be cleaned or rinsed with steam or clean water only.

B. INTERIM⁶ Additional Requirements:

1. There shall be no discharge of the following wastes to surface waters or groundwater of the State; fly ash and

bottom ash sluice wastes. Boiler and metal cleaning wastewater shall be transported off-site for treatment to a certified waste facility by a licensed vendor.

2. An annual report showing for each day of the month, the minimum, average, and maximum (i) gross station load (MWe), (ii) intake water temperature (°F), (iii) discharge water temperature (°F), and (iv) intake water volume (million gallons per day) shall be submitted to the Department's Division of Water offices in Albany and Region 2 (data shall be made available in electronic format -Quattro Pro or Excel format). Such report is due by March 15th of each year.
3. There shall be no visible sheen of oil and grease from outfalls 001 & 002.
4. There shall be no discharge of PCB's from this facility.
5. The permit application must list all the corrosion/scale inhibitors, biocidal-type or slimicides compounds used by the permittee. If use of new boiler/cooling water additives is intended, approval must be granted prior to use.
6. In all instances chlorine use shall be: 1) kept to the minimum amount which will maintain plant operating efficiency, and 2) done concurrently with thermal recirculation.
7. Information referred to in 6 NYCRR Part 750-2.8(e) - Residuals Management, shall be reported annually to NYSDEC office in Albany and Long Island City:

Attn.: James Gilmore
New York State Department of Environmental Conservation
Marine Resources Division
One Hunters Point Plaza
Long Island City, New York 11101-5407

8. The thermal discharge from this facility to the East River shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on the East River. In this regard, the permittee's 316(a) demonstration which requests a variance from thermal water quality criteria for surface temperature of 90°F Part 704.2(b)(5)(i)) and surface temperature increase of 4°F (704.2(b)(5)(ii) approval is hereby continued. The circulating cooling water system may be operated as designed for the 5 year life of this permit so that these temperatures may be exceeded only within a mixing zone having an area of 475,000 ft.². (NOTE: This condition may change based on information submitted in compliance Permit Condition B.26 (Thermal Discharge)).
9. Notwithstanding any other requirement in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Sanitation Commission, including Section 1.01 and 2.05(f) as they relate to oil and grease.
10. Samples for monitoring pH, Temperature and chlorine are to be collected within the discharge tunnels.
11. Stormwater Discharges:
Any stormwater discharges must be identified and covered by this SPDES permit to discharge. When a stormwater survey is completed; a modification of the Facility's SPDES Permit must be initiated by the applicant (if necessary). Facilities with SPDES Permits shall not have a separate General Permit for Stormwater.
12. When treating with Spectrus CT 1300 the following conditions apply:
 - a. Sampling must be conducted as Multiple Grab samples (For purpose of this authorization multiple grab is defined as individual grab samples collected on intervals not to exceed three hours), during application. A maximum concentration of up to 50µg/l is allowed during treatments (end of pipe, after detoxification).
 - b. Detoxification with bentonite clay or other Department approved adsorption medium is required. At least a 1:1 ratio with the initial concentration of molluscicide to detoxicant must be maintained.
 - c. Each individual mussel control treatment is limited up to a maximum of 24 hours addition of Molluscicide once-through treatment and limited to a maximum of 24 hours discharge of detoxified Molluscicide during a recirculation treatment.
 - d. Records of product use, effluent flow and concentration of product during application and discharge must be

maintained.

- e. The Regional Water Engineer shall be notified not less than 48 hours before initiation of zebra mussel control program.
- f. Upon elimination of initial infestations, treatments are limited to not more than 1 time annually.
- g. The reports describing the results of the effectiveness of the zebra mussel control program and effluent analyses for Molluscide shall be submitted annually to Regional Water Engineer, NYSDEC.
- h. This permit condition is based on the best environmental and aquatic toxicity information available at this time. This authorization is subject to modification or withdrawal any time new information becomes available which justifies such modification or withdrawal.

NOTE: For those situations where an effluent sample result is greater than the discharge limits due to suspected inadequate mixing of detoxicant, an additional sample shall be obtained as soon as possible to verify the initial result.

- 13. No plastic tubing or plastic containers may be used to transport or contain oil and grease samples.

B. ADDITIONAL CONDITIONS continued

BIOLOGICAL MONITORING REQUIREMENTS FOR INTERIM OPERATION

Note: All submissions under this section should provide :
Two (2) copies to the Steam Electric Unit Leader;
One (1) copy of the cover letter to the Division of Water
State Pollution Discharge Elimination System (SPDES)
Compliance Information Section; and
One (1) copy of the cover letter to the Regional Water Engineer;
unless otherwise noted.

14. Previously Required Technology - Variable Speed Pump Installation

By December 31, 2009, operation of variable speed pumps shall commence at Unit 50. By December 31, 2012, operation of variable speed pumps shall commence at Unit 40. By December 31, 2013, operation of variable speed pumps shall commence at Unit 30.

15. Technology Installation and Operation Plan

Within 6 months of the effective date of the permit modification requiring technologies and/or operational measures to meet requirements of 6 NYCRR Part 704.5 and §316(b) of the CWA the permittee must submit an approvable Technology Installation and Operation Plan. This plan must include:

- a. A schedule to replace all standard dual flow intake screens at Units 30, 40 and 50 with Ristroph modified dual flow intake screens by no later than ExPD;
- b. Approvable detailed engineering and installation plans and schedule to install and operate a dedicated fish return system to safely transport impinged fish back to the East River waterway; and
- c. Approvable detailed engineering and installation plans and schedule for the installation of the screens and for testing the use of fine mesh panels (1.0 mm or approximate) to minimize entrainment of fish eggs and larvae.

All engineering plans must be prepared by a person or firm licensed to practice professional engineering in the State of New York in accordance with standards accepted by DEC and must include detailed construction plans, an installation schedule, and an operating/maintenance plan for achieving the requirements in Biological Monitoring Requirement #17 in this permit. The Technology Installation and Operation Plan and approved schedule will become an enforceable condition of this SPDES permit.

B. ADDITIONAL CONDITIONS continued**16. Verification Monitoring Plan**

Within 6 months of the effective date of the permit modification requiring technologies and/or operational measures to meet requirements of 6 NYCRR Part 704.5 and §316(b) of the CWA, the permittee must submit an approvable Verification Monitoring Plan. This plan must include the following procedures to confirm that the necessary reductions in impingement and entrainment required by this permit are being achieved:

- a. A five year averaging period which shall include at a minimum, two years of biological monitoring to verify the full-scale performance of the selected BTA measures.
- b. A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring.
- c. A schedule of implementation.
- d. A draft proposed Standard Operation Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP must be updated as required by the Department. Upon receipt of Department approval the permittee must complete the Verification Monitoring Plan in accordance with the approved schedule. The Verification Monitoring Plan and approved schedule will become an enforceable condition of this SPDES permit.

Within 6 months of the completion of the Verification Monitoring Plan the permittee must submit an approvable report to the Steam Electric Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and §316(b) of the CWA.

17. Complete installation of BTA

By the expiration date of the permit (ExPD), installation of modified intake screens and a dedicated fish return system shall be completed. The reductions in entrainment and impingement mortality resulting from these technologies and/or operational measures can be no less stringent, and if possible, should be greater than the following requirements:

- a. Entrainment must be reduced by at least 70 % from the full-flow calculation baseline; and
- b. Impingement mortality must be reduced by at least 90 % from the full-flow calculation baseline;

18. Contingency Plan

If fine mesh panels are determined to be not feasible, or if the Verification Monitoring Plan indicates that entrainment reduction is less than the permit's required 70%, the applicant will be required to submit an approvable plan to further reduce entrainment losses to meet the entrainment performance requirement. The plan shall be submitted to these offices within 6 months of DEC notification.

B. ADDITIONAL CONDITIONS continued**19. Additional Reporting Requirements**

- a. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from EDP.
- b. The permittee must submit status reports at EDP + 2.5 years and EDP + 4.5 years. At a minimum, these status reports must include a description of the operational status of the facility during the preceding two years and compliance with Biological Requirements 1 through 4 of this permit.
- c. Six (6) months prior to the expiration date of this permit, the permittee must submit a report that includes:
 - i. A description and detailed analysis of the cumulative reductions in impingement and entrainment achieved during the first four years of this permit modification, and
 - ii. A detailed analysis of technologies and/or operational measures available at that time, which have been demonstrated to, or have the potential to, further reduce fish mortality. The list of technologies and/or operational measures included in this analysis must be selected with the concurrence of the Department.
- d. By March 1 of each calendar year, the permittee shall submit to the Steam Electric Unit Leader an annual report showing average daily cooling water usage by month and the percent reduction this represents from the full-flow calculation baseline. These data shall be submitted both in tabular form and electronically in Excel spreadsheet format.

20. General Requirement

- a. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Steam Electric Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 2, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR §704.5 and Section 316(b) of the Clean Water Act. As determined by NYS DEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.
- b. Thermal Discharge

By EDP + 12 months, the permittee must submit an approvable thermal study plans designed to address issues regarding the thermal criteria contained in 6 NYCRR Part 704 and the thermal standard contained in 6 NYCRR §704.1 and 316(a) of the Clean Water Act.

B. ADDITIONAL CONDITIONS continued

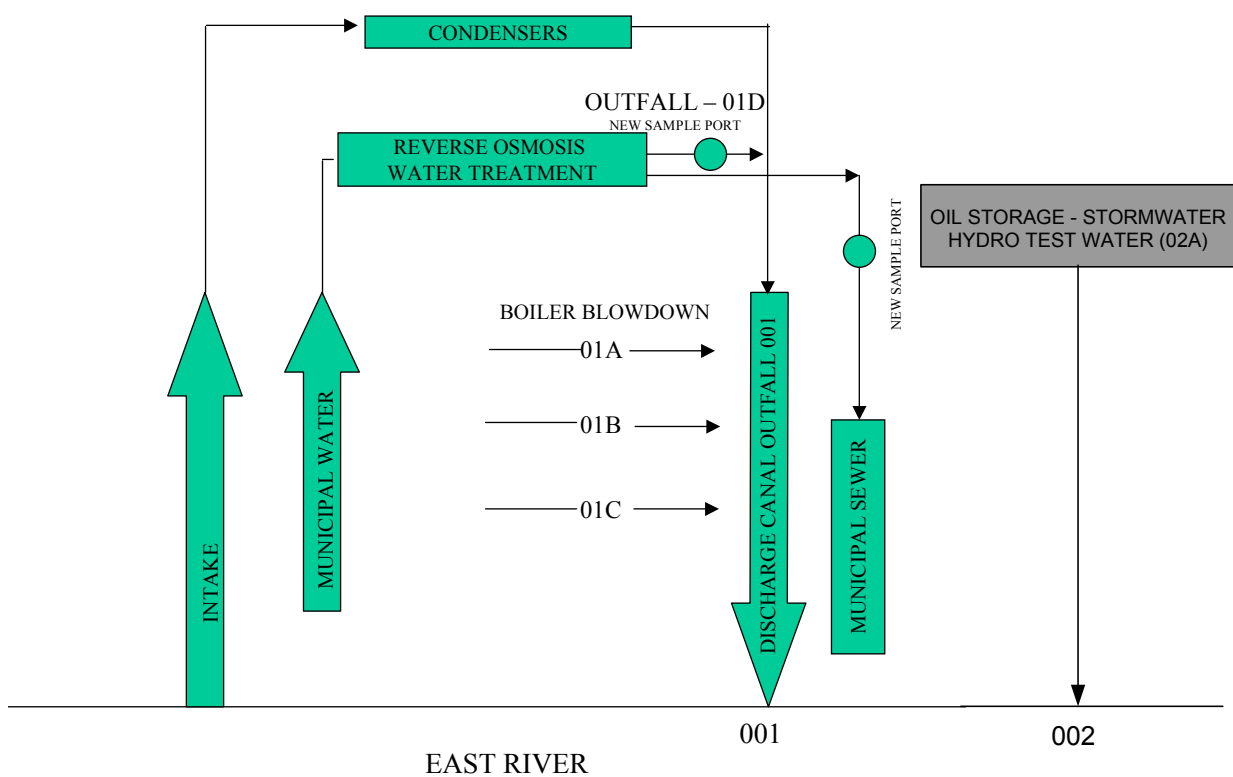
Thermal Criteria

The Thermal Criteria Study Plan must be designed to describe all applicable criteria contained in 6 NYCRR §704 and evaluate compliance with those criteria. The Thermal Criteria Study Plan must include study protocols, a schedule for conducting the studies, and the submission of approvable Thermal Criteria Report. The Thermal Criteria Report must include all information obtained from implementing the plan; provide a comparison of the applicable criteria to the varying operating conditions of the facility; document the Daily Maximum Discharge Temperature the facility can discharge to meet all applicable criteria; provide all assumptions, calculations, and models used in deriving the Daily Maximum Discharge Temperature; and provide all information required by NYCRR §702.17 to support the variance maintained in permit condition B.8.

Upon receipt of Department approval of the Thermal Study Plans, the permittee must complete the studies and submit the Thermal Reports in accordance with the approved schedules.

INTERIM⁶ 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:



**FINAL⁷
PERMIT
LIMITS,
LEVELS AND
MONITORING**

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING		
001	Combined discharge from suboutfalls 01A-01G (cooling tower blowdown, low volume waste, stormwater, reverse osmosis reject water/filter backwash)	East River	Footnote 7	ExpD		
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	6.0	9.0	SU	Weekly	Instantaneous	

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	Monitor	Monitor			MGD	Continuous	Pump Log	
Discharge Temperature	NA	30.8 (87.5)			°C(°F)	Continuous	Recorder	5

The temperature samples for Outfall 001 shall be collected prior to discharge from the mixing sump (for the combined discharge from Sub-Outfalls 01A, 01G and 01F).

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Cooling Tower Blowdown	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Weekly	Instantaneous	
Total Suspended Solids	NA	Monitor			mg/l	Weekly	Grab	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Chlorine, Total Residual	NA	0.2			mg/l	3/week	Grab	2
Zinc, Total	NA	1.0			mg/l	Weekly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	Low volume waste (equipment and floor drains, including water from oil water separator) from Existing AGS.	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	30	100			mg/l	Weekly	Grab	

Footnotes: See page 5

FINAL⁷ PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01C	Stormwater - Roof Drains (Main and New Buildings)	East River via Outfall 001	Footnote 7	ExPD
NO MONITORING REQUIRED				

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
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OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01D	Low volume waste (equipment and floor drains, including water from oil water separator) from Phase I.	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	30	100			mg/l	Weekly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01E	Low volume waste (equipment and floor drains, including water from oil water separator) from Phase II.	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	30	100			mg/l	Weekly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01F	Reverse Osmosis Reject Water/Filter Backwash	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Total Suspended Solids	30	100			mg/l	Weekly	Grab	

Footnotes: See page 5

FINAL⁷ PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
01G	Cooling Tower Blowdown	East River via Outfall 001	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Instantaneous	
Total Suspended Solids	NA	Monitor			mg/l	Weekly	Grab	
Oil & Grease	NA	15			mg/l	Weekly	Grab	
Chlorine, Total Residual	NA	0.2			mg/l	3/week	Grab	2
Zinc, Total	NA	1.0			mg/l	Weekly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Stormwater Runoff - Astoria Oil Storage	East River	Footnote 7	ExPD

PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	Monthly	Grab	
Benzene			0.1		mg/l	Quarterly	Grab	
Toluene			0.1		mg/l	Quarterly	Grab	
Xylenes			0.1		mg/l	Quarterly	Grab	
Ethylbenzene			0.1		mg/l	Quarterly	Grab	

Footnotes: See page 5

FINAL^b PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE			RECEIVING WATER	EFFECTIVE	EXPIRING		
02A	Hydro Test Water			East River (Via 002)	Footnote 7	ExPD		
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)		
pH	6.0	9.0	SU	Each Discharge	Grab	3		
PARAMETER	ENFORCEABLE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Daily Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Each Discharge	Instantaneous	3
Oil & Grease	NA	15			mg/l	Each Discharge	Grab(s)	3
Benzene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Toluene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Xylenes (Total)	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Ethylbenzene	NA	0.020			mg/l	Each Discharge	Grab(s)	3
Chlorine, Total Residual	NA	0.20			mg/l	Each Discharge	Grab(s)	3, 4

(INTERIM AND FINAL)PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	WASTEWATER TYPE				RECEIVING WATER	EFFECTIVE	EXPIRING	
A10	A10 Dock Fuel Offloading Containment Area - Discharge via Oil/Water Separator				East River	EDP	ExpD	
PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	Monthly	Grab	
Benzene			0.1		mg/l	Quarterly	Grab	
Toluene			0.1		mg/l	Quarterly	Grab	
Xylenes			0.1		mg/l	Quarterly	Grab	
Ethylbenzene			0.1		mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE				RECEIVING WATER	EFFECTIVE	EXPIRING	
TR1	Stormwater from Dock A10 Transformer Containment Area				Groundwater	EDP	ExpD	
PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	TYPE I	TYPE II				
Flow	NA	Monitor			GPD	Monthly	Calculated	
Oil & Grease	NA	15			mg/l	Monthly	Grab	

* Discharge from the Transformer Containment Area can be initiated only after six or more hours have passed since the cessation of the storm event to enable facility personnel to determine the presence of visible oil or floating substances unless unusual and significant circumstances warrant otherwise. The facility shall maintain a logbook recording date, time and signature of the person authorizing each discharge from the Transformer Containment Area. If there is a visible sheen or floating globules of oil on the stormwater within the secondary containment area, it must be reported to this Department immediately, and reasonable efforts must be made to remove the contamination prior to discharge.

C. FINAL⁷ Additional Requirements:

1. There shall be no discharge of the following wastes to surface waters or groundwater of the State; fly ash and bottom ash sluice wastes. Boiler and metal cleaning wastewater shall be transported off-site for treatment to a certified waste facility by a licensed vendor.
2. An annual report showing for each day of the month, the minimum, average, and maximum (i) gross station load (MWe), (ii) intake water temperature (°F), (iii) discharge water temperature (°F), and (iv) intake water volume (million gallons per day) shall be submitted to the Department's Division of Water offices in Albany and Region 2 (data shall be made available in electronic format -Quattro Pro or Excel format). Such report is due by March 15th of each year.
3. There shall be no visible sheen of oil and grease from outfalls 001 & 002.
4. There shall be no discharge of PCB's from this facility.
5. No biocides, dyes, corrosion control chemicals or other water treatment chemical additives are authorized for use by the permittee except for those identified in the application for this permit, listed in this permit, or in the approved engineering reports, specifications and final designs submitted under this permit. If additional chemical substances are contemplated, application for their approval must be made to the Department. All changes in chemical use shall be made in accordance with DEC's "Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees."
6. When treating with Spectrus CT 1300 the following conditions apply:
 - a. Sampling must be conducted as Multiple Grab samples (For purpose of this authorization multiple grab is defined as individual grab samples collected on intervals not to exceed three hours), during application. A maximum concentration of up to 50µg/l is allowed during treatments (end of pipe, after detoxification).
 - b. Detoxification with bentonite clay or other Department approved adsorption medium is required. At least a 1:1 ratio with the initial concentration of molluscicide to detoxicant must be maintained.
 - c. Each individual mussel control treatment is limited up to a maximum of 24 hours addition of Molluscicide once-through treatment and limited to a maximum of 24 hours discharge of detoxified Molluscicide during a recirculation treatment.
 - d. Records of product use, effluent flow and concentration of product during application and discharge must be maintained.
 - e. The Regional Water Engineer shall be notified not less than 48 hours before initiation of zebra mussel control program.
 - f. Upon elimination of initial infestations, treatments are limited to not more than 1 time annually.
 - g. The reports describing the results of the effectiveness of the zebra mussel control program and effluent analyses for Molluscicide shall be submitted annually to Regional Water Engineer, NYSDEC.
 - h. This permit condition is based on the best environmental and aquatic toxicity information available at this time. This authorization is subject to modification or withdrawal any time new information becomes available which justifies such modification or withdrawal.
- NOTE:** For those situations where an effluent sample result is greater than the discharge limits due to suspected inadequate mixing of detoxicant, an additional sample shall be obtained as soon as possible to verify the initial result.
7. In all instances, chlorine use shall be: 1) kept to the minimum amount which will maintain plant operating efficiency, and 2) done concurrently with thermal recirculation.
8. Samples for monitoring pH shall be collected within the discharge tunnel.

9. No later than two years after the commencement of commercial operation of this proposed facility, the applicant is required to complete and submit Items V and VI of NPDES Application Form 2C (Sect Para 122.21 (g) for Outfall 001).
10. Nothing in this permit shall be deemed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act, as amended, or under any other federal or state law or regulation.
11. The permittee shall notify the Department, in writing, within 30 days from the first firing of fuel in Phase II of the Repowering. Written notification shall be sent to the addresses listed on the last page of this permit.
12. Conditions for Repowered Cooling Water Intake System.
 - a. The cooling water intake structure shall have a maximum withdrawal rate of 34.6 million gallons per day from the East River when repowering is completed and both Units 4 and 5 are in full operation.
 - b. The cooling water intake structure for the Repowered Units 4 and 5 shall consist of four cylindrical wedge wire intake screens each, as described in the Article X Application Section 16.0, Water Quality Evaluation and Application for SPDES Permit Modification and Figures 16.5.2.6-1S and 16.5.2.6-2S of Supplement No. 4. Each screen shall have a slot width of 2.0 millimeters and a maximum through slot withdrawal velocity that shall be less than 0.5 feet/second. Detailed drawings of the screens and their placement within the intake bays are to be submitted to the Chief, NYSDEC Bureau of Habitat, 625 Broadway, Albany, NY, prior to construction startup of phase 1 of the repowering.
 - c. Upon commercial operation of the repowered Units 4 and 5, all cooling water withdrawn from the East River shall pass through the wedge wire screens. Within 12 months of the first fire of Phase II of the repowering, the water intake pumps and associated once-through cooling equipment in any screen wells open to the river will be permanently removed from service.

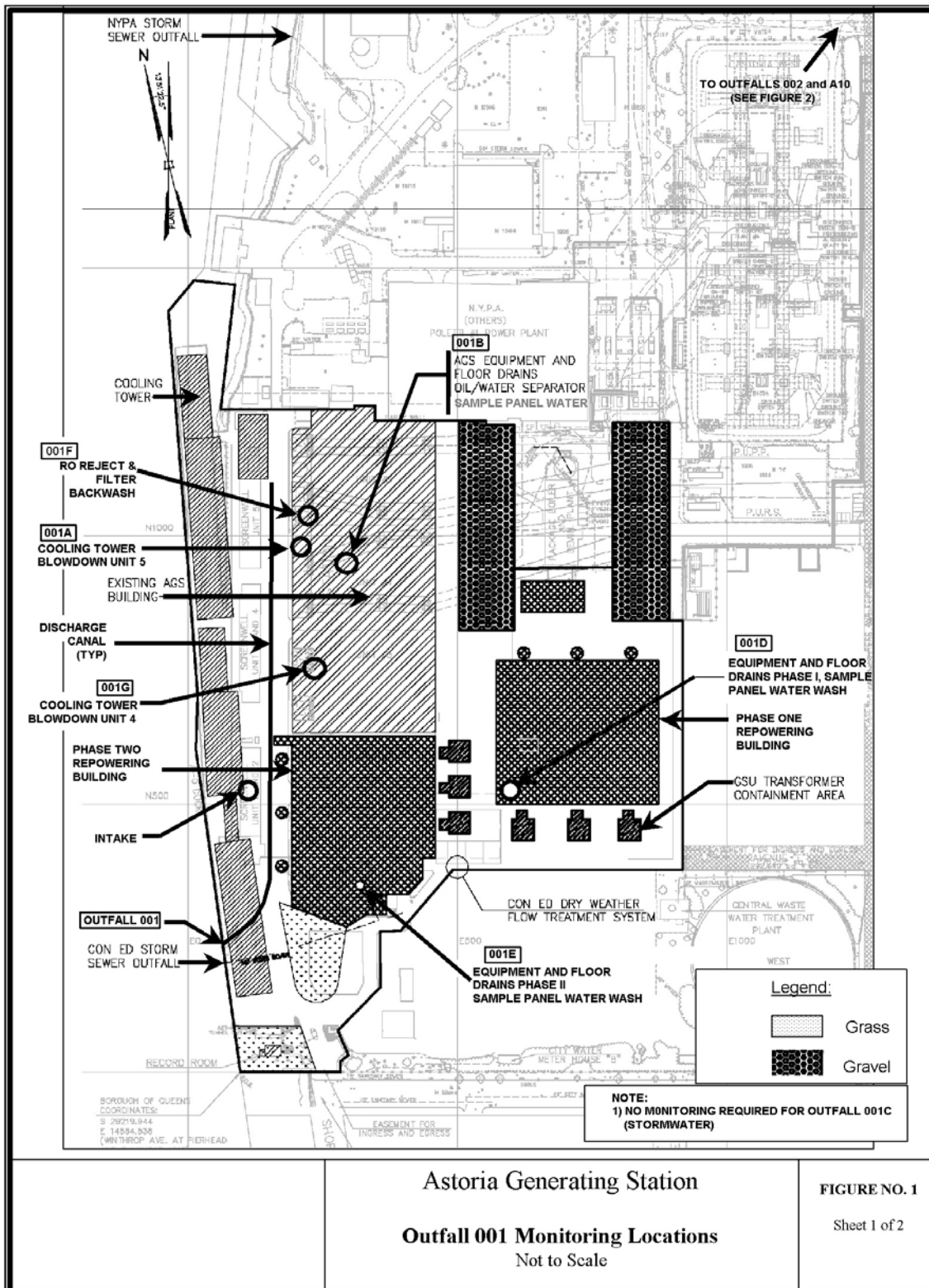
a) The permittee shall comply with the following schedule:

Action Code	Outfall Number(s)	Compliance Action	Due Date
	NA	B.14. Complete installation and commence operation of variable speed pumps at Units 50 (a), 40 (b) & 30 (c).	(a) December 31, 2009 (b) December 31, 2012 (c) December 31, 2013
		B.15. Submit an approvable "Technology Installation and Operation Plan" (TIOP)	EDPM + 6 months
		B.16. Submit an approvable "Verification Monitoring Plan. (VMP)	EDPM + 6 months
		B.17. Complete the installation of the Department Approved BTA (Modified Ristroph type screens at Units 30-50)	ExPD
		B.19(b). Submit status report	EDP+ 2.5Years and 4.5 years
		B.19(c). Submit report on cumulative reductions in impingement and entrainment and analysis of technologies.	EDP+ 4.5 years
		B.19(d). Submit cooling water use report	March 1 each year
		B.20(b). Submit an approvable "Thermal Study Plan" (TSP)	EDP + 12 months

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. 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.

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below: Sampling shall be conducted as required for each Suboutfall prior to discharge into the discharge canal for Outfall 001.



Astoria Generating Station

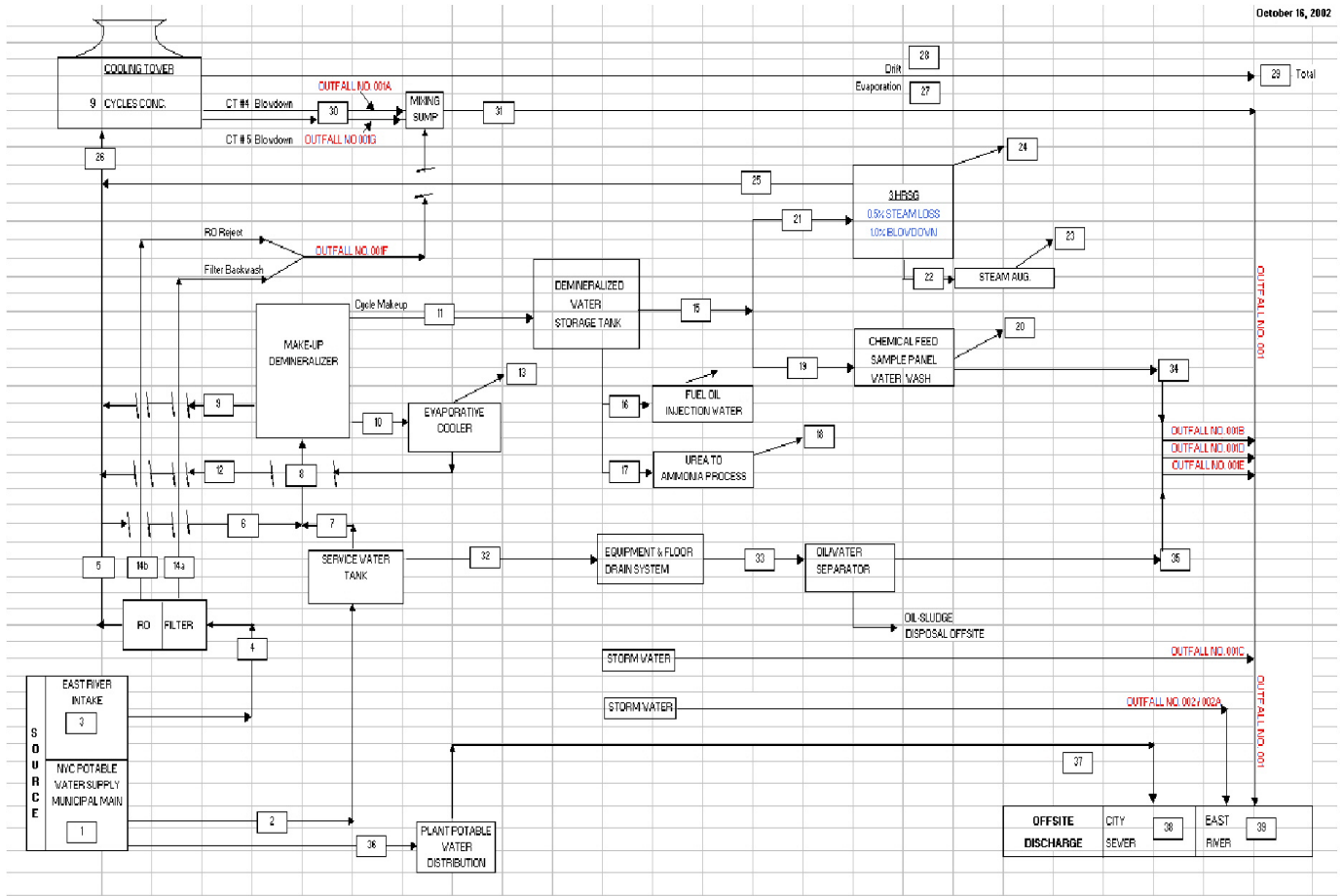
Outfall 001 Monitoring Locations
Not to Scale

FIGURE NO. 1

Sheet 1 of 2

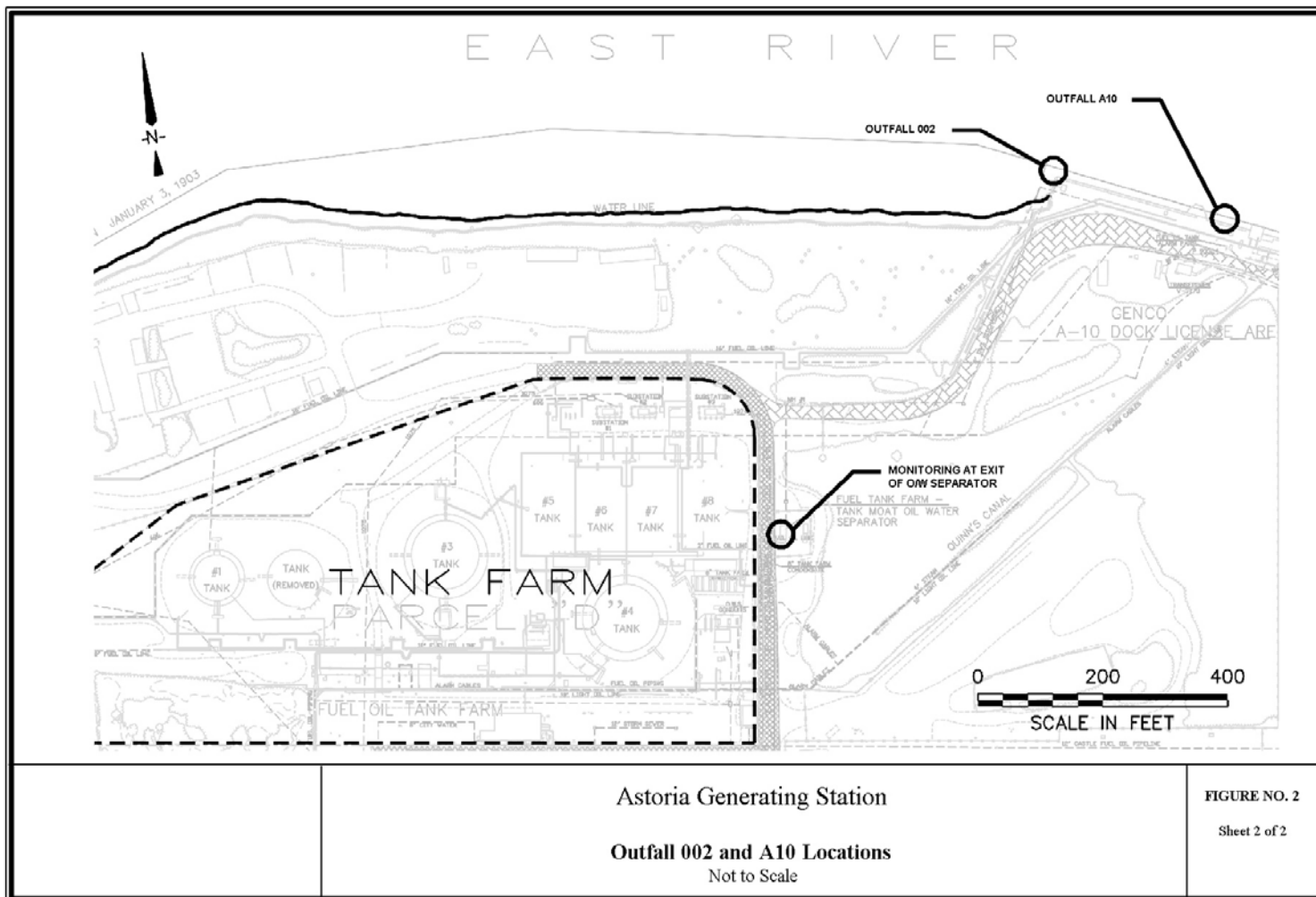
FINAL⁷ MONITORING LOCATIONS

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



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: The sampling location for Outfall A10 shall be after the Oil/Water Separator prior to discharge to the East River. The sampling location for Outfall TR1 (A10 Dock Transformer Containment stormwater discharge) shall be at the location where the stormwater is discharged to groundwater.



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 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.state.ny.us/website/dcs/permits/olpermits/form2c.pdf>) or that are required to be monitored for by the SPDES permit. [

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.

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.state.ny.us/website/dow/toolbox/swforms.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 is properly implemented.

5. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.
6. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (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.

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.

DISCHARGE NOTIFICATION REQUIREMENTS [

- a) The permittee shall maintain the existing identification signs at all outfalls to surface waters, which have not been waived by the Department in accordance with ECL 17-0815-a. 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: () - ### - #####

- b) For each discharge required to have a sign in accordance with a), the permittee shall provide for public review at a repository accessible to the public, 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.
- c) 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.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to 6 NYCRR Part 750-1.2(a) and 750-2 for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three 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 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		County Health Department or Environmental Control Agency specified
	and/or		below

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Division of Water
Bureau of Water Compliance Programs
625 Broadway
Albany, New York 12233-3506

Phone: (518)402-8177

Send the **original** (top sheet) of each DMR page to:

Department of Environmental Conservation
Regional Water Engineer, Region 2
One Hunters Point Plaza
Long Island City, New York 11101-5407
Phone: (718) 482-4933

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

- c) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.
- d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- f) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- g) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- h) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two 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 sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.