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FILES  
COO-F-1522

February 13, 2003

**VIA FEDERAL EXPRESS**

Hon. Janet Hand Deixler, Secretary  
New York State Board on Electric Generation Siting and the Environment  
Three Empire State Plaza  
Albany, New York 12223-1350

RE: Case 00-F-1522 - Application of Astoria Generating Company, L.P. for a Certificate of Environmental Compatibility and Public Need to Construct and Operate a 1,816 megawatt Natural Gas-Fired Combustion Combined Cycle Turbine Electric Generating Plant in the City of New York, Queens County, New York

Dear Secretary Deixler:

In the package of documents sent to the Siting Board on February 6, 2003, the original executed Water Treatment Chemical Forms and SPDES Industrial Application Form NY-2C were inadvertently omitted. They are enclosed herein. We apologize for any inconvenience.

Sincerely,

Ruth H. Silman

Enclosures

cc: Richard Benedict (w/o encls.)  
Doug Divine (w/o encls.)  
Scott M. Turner, Esq. (w/o encls.)  
Jessica A. Graf, Esq. (w/o encls.)



NYSDEC - Division of Water  
**WTC Usage Notification Requirements for SPDES Permittees**  
 Page 2 of 3

1.a. Date Signed by Permittee -			1.b. Date Signed by WTC Manufacturer -		
2.b. SPDES No. - NY -0005118			3.a. WTC Name - Amerfloc 482		
11. WTC BOD and COD (lb/lb) - BOD5:<1000mg/l COD: 501,000 mg/l					
12.a. Is WTC a NYS registered biocide?			12.b. Registration Number -		
13. WTC Toxicity Info (most sensitive species) - Attach description of endpoint for each EC50 and LOEC.					
13.a. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Rainbow Trout	0.51 mg/l	mg/l	mg/l	mg/l	96 Hour
13.b. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Fathead Minnow	1.22 mg/l	mg/l	mg/l	mg/l	96 Hour
13.c. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.d. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.e. Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	

14. Permittee Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete. The generic WTC usage requirements noted below will be adhered to.

PRINT NAME - J. Douglas Devine	SIGNATURE - <i>J. Devine</i>
TITLE/COMPANY - Officer-Astoria Generating Station	
TELEPHONE - 713- <del>207</del> -7630 497-7630	FAX - 713-207- <del>7630</del> Extension-9605 497-9605

15. WTC Manufacturer Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete.

PRINT NAME -	SIGNATURE -
TITLE/COMPANY -	
TELEPHONE -	FAX -

**WTC Usage Notification Requirements for SPDES Permittees**

1.a. Date Signed by Permittee -	1.b. Date Signed by WTC Manufacturer -
2.b. SPDES No. - NY -0005118	2.c. Contact Name -
3.a. WTC Name - Amerfloc 482	6.a. Avg/Max Daily Dosage = 342 / 342 lbs/day

Generic WTC Usage Requirements

- A. WTC use shall not exceed the rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must 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 and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

**Items 16 - 17 must be completed by NYSDEC permit writer.**

16. Review Decision (check the appropriate box). *Fax or mail a copy of the completed form to the person identified in item 2.c and, if appropriate, to the facility inspector.*

The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

The proposed WTC usage may not proceed for one of the following three reasons:

As noted below, the information provided is insufficient to complete our review.

As noted below, the SPDES permit must first be modified to add new requirements.

As noted below, the proposed use is prohibited.

17. Permit Writer Information:

PRINT NAME -	SIGNATURE -
TITLE -	DATE -
ADDRESS -	
TELEPHONE -	FAX -



**WTC Usage Notification Requirements for SPDES Permittees**

1.a. Date Signed by Permittee -		1.b. Date Signed by WTC Manufacturer -			
2.b. SPDES No. - NY -0005118		3.a. WTC Name - Ferric Sulfate			
11. WTC BOD and COD (lb/lb) -					
12.a. Is WTC a NYS registered biocide?			12.b. Registration Number -		
13. WTC Toxicity Info (most sensitive species) - Attach description of endpoint for each EC50 and LOEC.					
13.a. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Gambusia Affinis	37.2 mg/l	mg/l	mg/l	mg/l	
13.b. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.c. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Saccostrea Commercialis	mg/l	mg/l	0.1 mg/l	0.2 mg/l	
13.d. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.e. Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	

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PRINT NAME - J. Douglas Devine	SIGNATURE - <i>J. Devine</i>
TITLE/COMPANY - Officer - Astoria Generating Station	
TELEPHONE - 713-207-7630 497-7630	FAX - 713-207-7630 Extension 9605 497-9605

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PRINT NAME -	SIGNATURE -
TITLE/COMPANY -	
TELEPHONE -	FAX -

**WTC Usage Notification Requirements for SPDES Permittees**

1.a. Date Signed by Permittee -	1.b. Date Signed by WTC Manufacturer -
2.b. SPDES No. - NY -0005118	2.c. Contact Name -
3.a.. WTC Name - Ferric Sulfate	6.a. Avg/Max Daily Dosage = 822 / 822 lbs/day

Generic WTC Usage Requirements

- A. WTC use shall not exceed the rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must 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 and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

**Items 16 - 17 must be completed by NYSDEC permit writer.**

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The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

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As noted below, the SPDES permit must first be modified to add new requirements.

As noted below, the proposed use is prohibited.

17. Permit Writer Information:

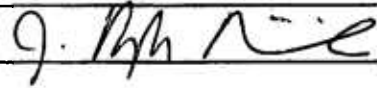
PRINT NAME -	SIGNATURE -
TITLE -	DATE -
ADDRESS -	
TELEPHONE -	FAX -



NYSDEC - Division of Water  
**WTC Usage Notification Requirements for SPDES Permittees**  
 Page 2 of 3

1.a. Date Signed by Permittee -		1.b. Date Signed by WTC Manufacturer -			
2.b. SPDES No. - NY-0005118		3.a. WTC Name - Hypersperse MDC700			
11. WTC BOD and COD (lb/lb) - BOD-28 (mg/g):12 COD (mg/g):190					
12.a. Is WTC a NYS registered biocide?			12.b. Registration Number -		
13. WTC Toxicity Info (most sensitive species) - Attach description of endpoint for each EC50 and LOEC.					
13.a. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Menidia Beryllina	23100 mg/l	mg/l	mg/l	mg/l	96 Hour
13.b. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.c. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Mysid Shrimp	13800 mg/l	mg/l	mg/l	mg/l	48 Hour
13.d. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.e. Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	

14. Permittee Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete. The generic WTC usage requirements noted below will be adhered to.

PRINT NAME - J. Douglas Devine	SIGNATURE - 
TITLE/COMPANY - Officer - Astoria Generating Station	
TELEPHONE - 713-207-7630 497-7630	FAX - 713-207-7630 Extension 9605 497-9605

15. WTC Manufacturer Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete.

PRINT NAME -	SIGNATURE -
TITLE/COMPANY -	
TELEPHONE -	FAX -

**WTC Usage Notification Requirements for SPDES Permittees**

1.a. Date Signed by Permittee -	1.b. Date Signed by WTC Manufacturer -
2.b. SPDES No. - NY -0005118	2.c. Contact Name -
3.a.. WTC Name - Hypersperse MDC700	6.a. Avg/Max Daily Dosage = 342 / 342 lbs/day

Generic WTC Usage Requirements

- A. WTC use shall not exceed the rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must 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 and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

**Items 16 - 17 must be completed by NYSDEC permit writer.**

16. Review Decision (check the appropriate box). *Fax or mail a copy of the completed form to the person identified in item 2.c and, if appropriate, to the facility inspector.*

The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

The proposed WTC usage may not proceed for one of the following three reasons:

As noted below, the information provided is insufficient to complete our review.

As noted below, the SPDES permit must first be modified to add new requirements.

As noted below, the proposed use is prohibited.

17. Permit Writer Information:

PRINT NAME -	SIGNATURE -
TITLE -	DATE -
ADDRESS -	
TELEPHONE -	FAX -

**Water Treatment Chemical (WTC) Usage Notification Requirements for SPDES Permittees**

Note: All requested information must be supplied. Incomplete submissions will not be reviewed.

Permittee completes items 1a and 2 - 14. Alternatively, the permittee may complete items 1a, 2 - 9 and 14 if the WTC manufacturer completes items 1b, 10 - 13 and 15. See instructions page.


1.a. Date Signed by Permittee -		1.b. Date Signed by WTC Manufacturer -	
2.a. Permittee Name - Astoria Generating Company, L.P.		2.b. SPDES No. - NY -0005118	
2.c. Contact Name -			
3.a. WTC Name - Sodium Metabisulfite			
3.b. WTC Manufacturer - Solvay Minerals, Inc.			
4. WTC Function - Chlorine Reduction			
5. Affected Outfall(s) - outfalls 001			
6.a. WTC Daily Dosage: average lbs/day = 685		, maximum lbs/day = 685	
6.b. Dosage Frequency: minutes/day = 1440		, days/week = 7	
7.a. Outfall Flow Rate: average MGD = 11.00		, maximum MGD = 19.32	
7.b. Outfall WTC Concentration: average mg/l = 0.076		, maximum mg/l = 0.076	
8.a. System Blowdown Flow Rate: average gpm = 7638		, maximum gpm = 13,389	
8.b. System Blowdown Frequency: minutes/day = 1440		, days/week = 7	
9. List measures in place to ensure that excessive levels of WTC are not used and subsequently discharged -			
10.a. WTC Composition - Ingredients/Impurities (note: ingredients/impurities must total to 100%)	10.b. %	10.c. CAS#	10.d. Outfall Concentration
Sodium Metabisulfite	99	7681-57-4	<.076 mg/l
Sodium Sulfate	1	7757-82-6	<.076 mg/l
			mg/l
			mg/l
			mg/l
			mg/l
			mg/l
10.e. Intermediate/Final Degradation Products -			

## WTC Usage Notification Requirements for SPDES Permittees

Page 2 of 3

1.a. Date Signed by Permittee -		1.b. Date Signed by WTC Manufacturer -			
2.b. SPDES No. - NY -0005118		3.a. WTC Name - Sodium Metabisulfite			
11. WTC BOD and COD (lb/lb) - COD mg/02/g					
12.a. Is WTC a NYS registered biocide?			12.b. Registration Number -		
13. WTC Toxicity Info (most sensitive species) - Attach description of endpoint for each EC50 and LOEC.					
13.a. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Rainbow Trout 100-	200 mg/l	mg/l	mg/l	mg/l	96 Hour
13.b. Vertebrate Species	LC50	EC50	NOEC	LOEC	Other -
Golden Orfe	200 mg/l	mg/l	mg/l	mg/l	48 Hour
13.c. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.d. Invertebrate Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	
13.e. Species	LC50	EC50	NOEC	LOEC	Other -
	mg/l	mg/l	mg/l	mg/l	

14. Permittee Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete. The generic WTC usage requirements noted below will be adhered to.

PRINT NAME - J. Douglas Devine	SIGNATURE - 
TITLE/COMPANY - Officer - Astoria Generating Station	
TELEPHONE - 713-207-7630 497-7630	FAX - 713-207-7630 Extension 9605 497-9605

15. WTC Manufacturer Certification - I certify under penalty of law that this notification and all attachments are, to the best of my knowledge and belief, true, accurate and complete.

PRINT NAME -	SIGNATURE -
TITLE/COMPANY -	
TELEPHONE -	FAX -

**WTC Usage Notification Requirements for SPDES Permittees**

1.a. Date Signed by Permittee -	1.b. Date Signed by WTC Manufacturer -
2.b. SPDES No. - NY -0005118	2.c. Contact Name -
3.a. WTC Name - Sodium Metabisulfite	6.a. Avg/Max Daily Dosage = 685 / 685 lbs/day

Generic WTC Usage Requirements

- A. WTC use shall not exceed the rate reported by the permittee or authorized below, whichever is less.
- B. The discharge shall not cause or contribute to a violation of water quality or an exceedance of AWQC.
- C. **The permittee must 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 and subsequently discharged through outfalls. The permittee shall retain the logbook data for a period of at least 3 years. This period may be extended by request of the DEC.
- D. **The permittee shall provide an annual report**, attached to the December DMR, containing the following information for each outfall: the current list of WTCs authorized for use and discharge by the DEC, for each WTC the amount in pounds used during the year, identification of authorized WTCs the permittee no longer uses, and any other pertinent information.

**Items 16 - 17 must be completed by NYSDEC permit writer.**

16. Review Decision (check the appropriate box). *Fax or mail a copy of the completed form to the person identified in item 2.c and, if appropriate, to the facility inspector.*

The proposed WTC usage may proceed as proposed without permit modification subject to the conditions noted above.

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- As noted below, the information provided is insufficient to complete our review.
- As noted below, the SPDES permit must first be modified to add new requirements.
- As noted below, the proposed use is prohibited.

17. Permit Writer Information:

PRINT NAME -	SIGNATURE -
TITLE -	DATE -
ADDRESS -	
TELEPHONE -	FAX -

State Pollutant Discharge Elimination System (SPDES)  
**INDUSTRIAL APPLICATION FORM NY-2C**  
 For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water  
**Section I - Permittee and Facility Information**

Please type or print the requested information.

**Current Permit Information** (leave blank if for new discharge)

SPDES Number: NY-0005118      DEC Number: 2-6301-0006/00012-0

**2. Permit Action Requested:** (Check applicable box)

<input type="checkbox"/>	A NEW proposed discharge	<input type="checkbox"/>	An EBPS INFORMATION REQUEST response	<input type="checkbox"/>	A RENEWAL of an existing SPDES permit
<input checked="" type="checkbox"/>	A MODIFICATION of the existing permit	<input type="checkbox"/>	An EXISTING discharge currently without permit	<input type="checkbox"/>	

Does this request include an increase in the quantity of water discharged from your facility to the waters of the State?

<input type="checkbox"/>	YES - Describe the increase:	
<input checked="" type="checkbox"/>	NO - Go to Item 3. below.	

**3. Permittee Name and Address**

Name <b>Astoria Generating Company</b>		Attention	
Street Address 225 Greenfield Parkway, Suite 207			
City or Village Liverpool		State NY	ZIP Code 13088

**4. Facility Name, Address and Location**

Name <b>Astoria Generating Station</b>				
Street Address 18-01 20 <sup>th</sup> Avenue				P.O. Box
City or Village <b>Astoria</b>		State NY	ZIP Code 11105-4271	
Town		County Queens		
Telephone 718-204-3900	FAX 718-204-3960		NYTM - E 40° 47' 18"	NYTM - N 73° 54' 50"
Tax Map Info (New York City, Nassau County and Suffolk County only)				
Section	Block	Subblock	Lot	

**5. Facility Contact Person**

Name Harold Morrison		Title Plant Manager	
Street Address 18-01 20 <sup>th</sup> Avenue			P.O. Box
City or Village Astoria		State NY	ZIP Code 11105-4271
Telephone 718-204-3900	FAX 718-204-3960	E-Mail or Internet	

**6. Discharge Monitoring Report (DMR) Mailing Address**

Mailing Name <b>Astoria Generating Station</b>			
Street Address 18-01 20 <sup>th</sup> Avenue			P.O. Box
City or Village Astoria		State NY	ZIP Code 11105-4271
Telephone 718-204-3900	FAX 718-204-3960	E-Mail or Internet	
Name and Title of person responsible for signing DMRs Harold Morrison, Plant Manager		Signature	

**INDUSTRIAL APPLICATION FORM NY-2C  
Section I - Permittee and Facility Information**

Facility Name: Astoria Generating Station	SPDES Number: NY-0005118
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**Summarize the outfalls present at the facility:**

Outfall Number	Receiving Water	Type of discharge
001*	East River	Cooling tower blowdown, RO reject and filter backwash, HRSG blowdown, equipment, floor drains, and sample panel water wash
001A	East River	Cooling tower blowdown - Unit 5
001B	East River	Equipment and floor drains and sample panel water wash
001C	East River	Stormwater-roof drains, main and new building
001D	East River	Equipment and floor drains phase I and sample panel water wash
001E	East River	Equipment and floor drains phase II and sample panel water wash
001F	East River	RO reject and filter backwash
001G	East River	Cooling tower blowdown - Unit 4
002	East River	Stormwater run off - Astoria oil storage
002A	East River	Hydro test water
003, 004	N/A	No longer exist

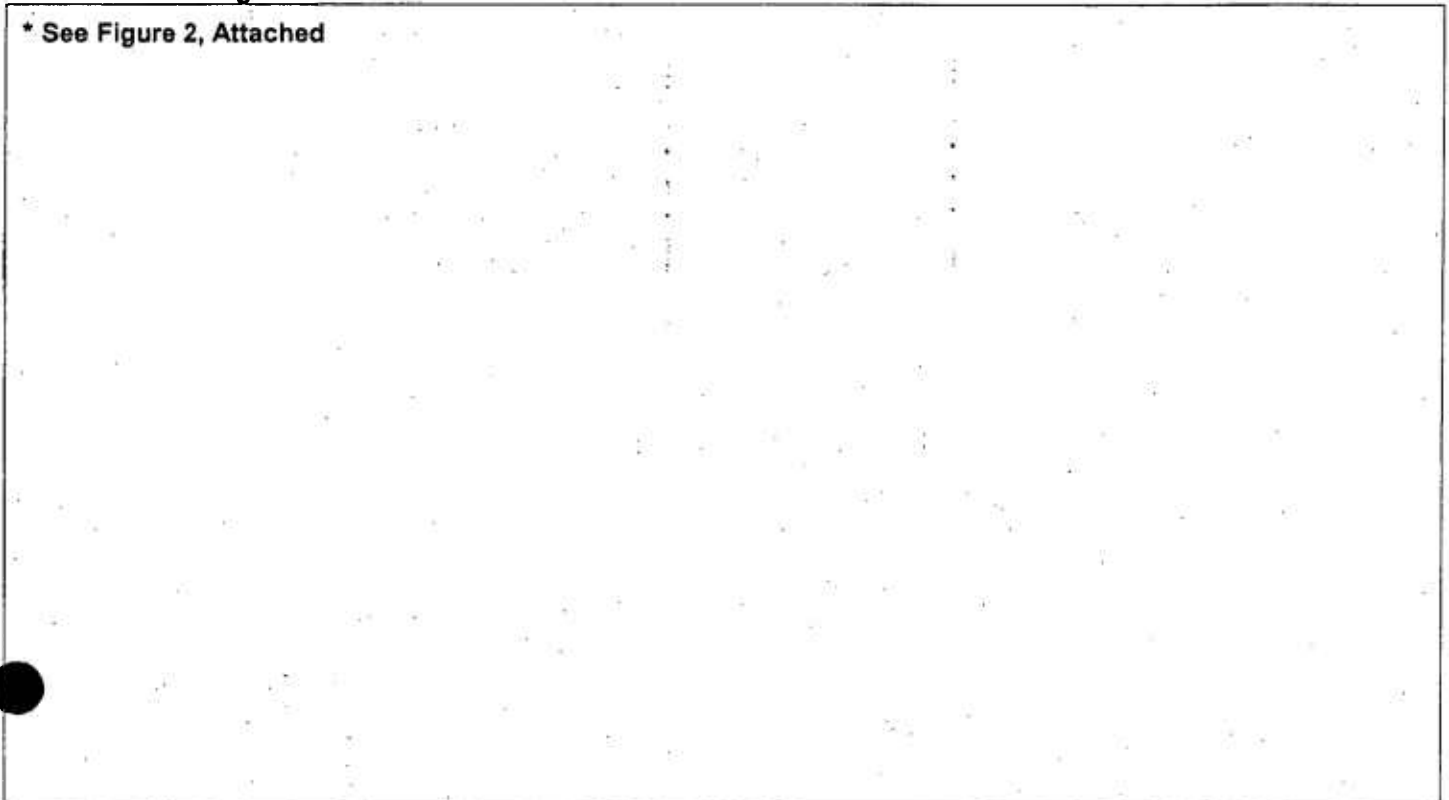
\*001 is the outfall to the east river. 001A-001G discharge into the discharge canal which in turn, discharges to the east river through Outfall 001.

**Map of Facility and Discharge Locations:**

Provide a detailed map showing the location of the facility, all buildings or structures present, wastewater discharge systems, outfall locations into receiving waters, nearby surface water bodies, water supply wells, and groundwater monitoring wells, and attach it to this application. Also submit proof, either by indication on the map or other documentation, that a right of way for the discharges exists from the facility property to a public right of way.

**9. Water Flow Diagram:**

\* See Figure 2, Attached



**INDUSTRIAL APPLICATION FORM NY-2C  
Section I - Permittee and Facility Information**

Facility Name: <b>Astoria Generating Station</b>	SPDES Number: <b>NY-0005118</b>
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**10. Nature of business:** (Describe the activities at the facility and the date(s) that operation(s) at the facility commenced)

Steam Electric Generating – The repowering of the Astoria Generating Station will result in the retirement of four existing steam boilers with six combined cycle gas turbines in two phases. The Repowered AGS will result in significant reductions of air and water pollutants and provide additional electric supply to New York City and the greater New York Area.

**11. List the 4-digit SIC codes which describe your facility in order of priority:**

Priority 1 4   9   1   1	Description: Steam Electric Generating	Priority 3 	Description:
Priority 2 	Description:	Priority 4 	Description:

**12. Is your facility a primary industry as listed in Table 1 of the instructions?**

YES - Complete the following table.

NO - Go to Item 13. below.

Industrial Category	40 CFR		Industrial Category	40 CFR	
	Part	Subpart		Part	Subpart
Steam Electric Generating	423	N/A			

**13. Does this facility manufacture, handle, or discharge recombinant-DNA, pathogens, or other potentially infectious or dangerous organisms?**

YES - Attach a detailed explanation to this application.

NO - Go to Item 14 below.

**14. Is storm runoff or leachate from a material storage area discharged by your facility?**

YES - Complete the following table, and show the location of the stockpile(s) and discharge point(s) on the diagram in Item 9.

NO - Go to Item 15 on the following page.

Size of area (include units)	Type(s) of material stored	Quantity of material stored (include units)	Runoff control devices

**INDUSTRIAL APPLICATION FORM NY-2C**  
**Section I - Permittee and Facility Information**

Facility Name: Astoria Generating Station	SPDES Number: NY-0005118
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**15. Facility Ownership:** (Place an "X" in the appropriate box)

Corporate	Sole Proprietorship	Partnership	<input checked="" type="checkbox"/>	Municipal	State	Federal	Other
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Are any of the discharges applied for in this application on Indian lands?	Yes	No	<input checked="" type="checkbox"/>
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**16. List information on any other environmental permits for this facility:**

Issuing Agency	Permit Type	Permit Number	Permit Status		
			Active	Applied for	Inactive
NYSDEC	Boiler #20/#30	2-6301-00185	<input checked="" type="checkbox"/>		
NYSDEC	Boiler #40	630000CE0141	<input checked="" type="checkbox"/>		
		630000CE0142	<input checked="" type="checkbox"/>		
		2-6301-00185	<input checked="" type="checkbox"/>		

**17. Laboratory Certification:**

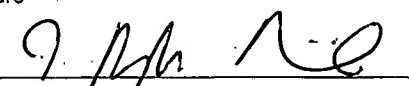
Were any of the analyses reported in Section III of this application performed by a contract laboratory or a consulting firm?

<input checked="" type="checkbox"/>	YES - Complete the following table.
<input type="checkbox"/>	NO - Go to Item 18 below.

Name of laboratory or consulting firm	Address	Telephone (area code and number)	Pollutants analyzed
Severn Trent Laboratories, Inc.	315 Fullerton Avenue Newburgh, NY 12550	845-562-0890	Pollution analyzed from East River water samples, which were used to calculate estimated effluent characteristics.

**18. Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title (type or print) J. Douglas Devine - Officer	Date signed
Signature 	Telephone number 713-207-7630 497-7630
	FAX number 713-207-7630 xt.9605 497-9605



**State Pollutant Discharge Elimination System (SPDES)**  
**INDUSTRIAL APPLICATION FORM NY-2C**  
 For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

**Section II - Outfall Information**  
 Please type or print the requested information.

Facility Name: <b>Astoria Generating Station</b>	SPDES Number: <b>NY-0005118</b>
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**1. Outfall Number and Location**

Outfall No.: <b>001</b>		
Latitude <b>40 ° 47 ' 18 "</b>	Longitude <b>73 ° 54 ' 50 "</b>	Receiving Water <b>East River</b>

**2. Type of Discharge and Discharge Rate (List all information applicable to this outfall)**

	Volume/ Flow	Units				Volume/ Flow	Units		
		MGD	GPM	Other (specify)			MG D	GPM	Other (specify)
a. Process Wastewater					f. Noncontact Cooling Water Blowdown	<b>0.95</b>	<b>X</b>		<b>AVG</b>
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water	<b>See 001C</b>			
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify): <b>Equipment and floor drains and sample panel water wash (001B, D, E)</b>						<b>27,000</b>			<b>gpd AVG</b>
Other discharge (specify): <b>RO Reject and Filter Backwash (001F)</b>						<b>10.04</b>	<b>X</b>		<b>AVG</b>

**3. List process information for the Process Wastewater streams identified in 2.a-d above: N/A**

a. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
b. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
c. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
d. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		

**Expected or Proposed Discharge Flow Rates for this outfall: DOES NOT INCLUDE STORMWATER (SEE 001C)**

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
<b>4,000 MG</b>	<b>8.07 MGD</b>	<b>11.00 MGD</b>	<b>13.57 MGD</b>	<b>19.32 (+) MGD</b>

**INDUSTRIAL APPLICATION FORM NY-2C  
Section II - Outfall Information**

Outfall No.: 001
SPDES Number: NY-0005118

Facility Name: *Astoria Generating Station*

**5. Is this a seasonal discharge?**

YES - Complete the following table.  
 NO - Go to Item 6 below.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day		Total volume per discharge	Units	Duration (Days)
			LTA	Daily Max			

**6. Water Supply Source** (indicate all that apply)

	Name or owner of water supply source	Volume or flow	Units (check one)		
			MGD	GPD	GPM
Municipal Supply	<i>CITY OF NEW YORK (001B, D, E)</i>	<i>26,974</i>	<input type="checkbox"/> MGD	<input checked="" type="checkbox"/> X GPD	<input type="checkbox"/> GPM
Private Surface Water Source			<input type="checkbox"/> MGD	<input type="checkbox"/> GPD	<input type="checkbox"/> GPM
Private Supply Well			<input type="checkbox"/> MGD	<input type="checkbox"/> GPD	<input type="checkbox"/> GPM
Other (specify)	<i>East River</i>	<i>18.40 (AVG)</i>	<input checked="" type="checkbox"/> X MGD	<input type="checkbox"/> GPD	<input type="checkbox"/> GPM

**7. Outfall configuration:** (Surface water discharges only)

**A. Where is the discharge point located with respect to the receiving water?**

In the streambank:  X

In the stream:

Within a lake or ponded water:

Within an estuary:  X Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser:  Attach description, including configuration and plan drawing of diffuser, if used.

**B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located? NA**

10%  25%  50%  Other

**C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:**

Stream width	Stream depth	Stream velocity	Are the results of a mixing/diffusion study attached? <input checked="" type="checkbox"/> X YES SEE APPENDIX 16-H
Feet	Feet	Feet/Sce	

Section II - Outfall Information

Outfall No.: 001
SPDES Number: NY-0005118

Facility Name: **Astoria Generating Station**

**8. Thermal Discharge Criteria**

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

YES - Complete the following table.

Information on the intake and discharge configuration of this outfall is attached. SEE ATTACHMENT NO. 5

NO - Go to Item 9. below.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To		
10	13.3 TYP	87.5	*	*	*	*	19.3	SUBSURFACE

**\*VARIABLE DEPENDENT UPON AIR TEMPERATURE**

**9. Are any water treatment chemicals or additives that are used by your facility subsequently discharged through this outfall?**

YES - Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed. SEE ATTACHMENT NO. 6

NO - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name
Ashland	Amercor 8780	Kramer	Caustic Soda
Ashland	Amercor 8755	Kramer	Disodium Phosphate
Nalco	Acti-Brom 1338	Ashland	Adjunct B
Manley-Regan	Sodium Hypochlorite	Ashland Chemical	Drewsporse 747A
Ashland	Mekor 6701	To Be Determined*	Sulfuric Acid*
Betzdearborn	Spectrus CT 1300	Solvay Minerals, Inc.	Sodium Metabisulfite
Betzdearborn	Spectrus DT 1400	Malinckrodt Baker, Inc.	Ferric Sulfate
Betzdearborn	Hypersperse MDC 700	Ashland	Amerfloc 482

**\*Proposed NEW Chemical**

**10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?**

YES - Complete the following table.

NO - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	

**INDUSTRIAL APPLICATION FORM NY-2C  
Section II - Outfall Information**

Outfall No.: 001
SPDES Number: NY-0005118

Facility Name: *Astoria Generating Station*

11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?

- YES - Complete the following table. Treatment codes are listed in Table 4.
- NO - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)	
			Required	Projected

12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?

- YES - Complete the following table.
- NO - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected
<i>Repowering of Astoria Generating Station</i>	DEC C02-19990430-28	No		2006

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

**INDUSTRIAL APPLICATION FORM NY-2C**  
Section III - Sampling Information

Facility Name: <b>Astoria Generating Station</b>	SPDES No.: <b>NY-0005118</b>
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Outfall No.: <b>001</b>
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**1. Sampling Information - Conventional Parameters SEE ATTACHMENT NO. 4**

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data								Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses	
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass		
a. Biochemical Oxygen Demand 5 day (BOD)													
b. Chemical Oxygen Demand (COD)													
c. Total Suspended Solids (TSS)													
d. Total Dissolved Solids (TDS)													
e. Oil & Grease													
f. Chlorine - Total Residual (TRC)													
g. Total Organic Nitrogen (TON)													
h. Ammonia (as N)													
i. Flow	Value		Value		Value						Value		
j. Temperature, winter	Value		Value		Value				DEGREES CELSIUS (°C)		Value		
k. Temperature, summer	Value		Value		Value				DEGREES CELSIUS (°C)		Value		
l. pH	Minimum	Maximum	Minimum	Maximum					STANDARD UNITS		Minimum	Maximum	

**2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

**a. Primary Industries:**

i. Does the discharge from this outfall contain process wastewater?  Yes - Go to Item ii. below.  
 No - Go to Item b. below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles:  Acid:  Base/Neutral:  Pesticide:

**b. All applicants:**

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?  
 Yes - Concentration and mass data attached. **SEE ATTACHMENT NO. 4**  
 No - Go to Item ii. below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?  
 Yes - Source or reason for presence in discharge attached  
 Yes - Quantitative or qualitative data attached **SEE ATTACHMENT NO. 4**  
 No

**INDUSTRIAL APPLICATION FORM NY-2C**  
**Section III - Sampling Information**

Facility Name: <b>Astoria Generating Station</b>	SPDES No.: <b>NY-0005118</b>
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Outfall No.: <b>001</b>
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**3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. **SEE ATTACHMENT NO. 4**

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7 or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.											Page 1 of 1		
Pollutant and CAS Number	Effluent data						Units		Intake data (optional)			Believed present, no sampling results available	
	a. Maximum daily value		b. Maximum 30 day value (if available)		c. Long term average value (if available)		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value			d. Number of analyses
	(1)Concentration	(2)Mass	(1)Concentration	(2)Mass	(1)Concentration	(2)Mass				(1)Concentration	(2)Mass		
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													



State Pollutant Discharge Elimination System (SPDES)  
**INDUSTRIAL APPLICATION FORM NY-2C**  
 For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water  
**Section II - Outfall Information**  
 Please type or print the requested information.

Facility Name: <b>Astoria Generating Station</b>	SPDES Number: <b>NY-0005118</b>
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**1. Outfall Number and Location**

Outfall No.: <b>001A</b>		
Latitude <b>40 ° 47 ' 18 "</b>	Longitude <b>73 ° 54 ' 50 "</b>	Receiving Water <b>East River via Outfall 001</b>

**2. Type of Discharge and Discharge Rate** (List all information applicable to this outfall)

	Volume/ Flow	Units				Volume/ Flow	Units		
		MGD	GPM	Other (specify)			MGD	GPM	Other (specify)
a. Process Wastewater					f. Noncontact Cooling Water Blowdown*	<b>0.41</b>	<b>X</b>		<b>AVG</b>
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water				
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify):									
Other discharge (specify):									

\*Flow is apportioned 43% to Unit 5 (001A) 9 cell tower and 57% to Unit 4 (001G) 12 cell tower.

**3. List process information for the Process Wastewater streams identified in 2.a-d above: N/A**

a. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
b. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
c. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
d. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		

**Expected or Proposed Discharge Flow Rates for this outfall:**

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
<b>15 MG</b>	<b>0.31 MGD</b>	<b>0.41 MGD</b>	<b>.52 MGD</b>	<b>.52 (+) MGD</b>

**INDUSTRIAL APPLICATION FORM NY-2C  
Section II - Outfall Information**

Outfall No.: 001A

Facility Name: Astoria Generating Station

SPDES Number: NY-0005118

**5. Is this a seasonal discharge?**

YES - Complete the following table.

NO - Go to Item 6 below.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day		Total volume per discharge	Units	Duration (Days)
			LTA	Daily Max			

**6. Water Supply Source (indicate all that apply)**

	Name or owner of water supply source	Volume or flow	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)*	East River	7.91 (AVG)	X MGD	GPD	GPM

\*See note under Section II, No. 2 F.

**7. Outfall configuration: (Surface water discharges only) NOT A SURFACE WATER DISCHARGE**

**A. Where is the discharge point located with respect to the receiving water?**

In the streambank:

In the stream:

Within a lake or ponded water:

Within an estuary:  Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser:  Attach description, including configuration and plan drawing of diffuser, if used.

**B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?**

10%  25%  50%  Other

**C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:**

Stream width	Stream depth	Stream velocity
Feet	Feet	Feet/Sec

Are the results of a mixing/diffusion study attached?  YES

NO

Section II - Outfall Information

Outfall No.: 001A

Facility Name: Astoria Generating Station

SPDES Number: NY-0005118

8. Thermal Discharge Criteria - DISCHARGES TO OUTFALL 001 WHICH DISCHARGES TO THE EAST RIVER

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

YES - Complete the following table.

Information on the intake and discharge configuration of this outfall is attached.

NO - Go to Item 9. below.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To		

9. Are any water treatment chemicals or additives that are used by your facility subsequently discharged through this outfall?

YES - Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

NO - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name
Ashland	Amercor 8780	Kramer	Caustic Soda
Ashland	Amercor 8755	Kramer	Disodium Phosphate
Nalco	Acti-Brom 1338	Ashland	Adjunct B
Manley-Regan	Sodium Hypochlorite	Ashland Chemical	Drewspere 747A
Ashland	Mekor 6701	To Be Determined*	Sulfuric Acid*
Betzdearborn	Spectrus CT 1300		
Betzdearborn	Spectrus DT 1400		

\*Proposed NEW Chemical

10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?

YES - Complete the following table.

NO - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	

**INDUSTRIAL APPLICATION FORM NY-2C  
Section II - Outfall Information**

Facility Name: <i>Astoria Generating Station</i>	Outfall No.: <i>001A</i>
	SPDES Number: <i>NY-0005118</i>

**11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?**

- YES - Complete the following table. Treatment codes are listed in Table 4.
- NO - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)

**12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?**

- YES - Complete the following table.
- NO - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected
<i>Repowering of Astoria Generating Station</i>	<i>DEC C02-19990430-28</i>	<i>No</i>		<i>2006</i>

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

**INDUSTRIAL APPLICATION FORM NY-2C  
Section III - Sampling Information**

Facility Name: *Astoria Generating Station*

SPDES No.: NY-0005118

Outfall No.: 001A

**1. Sampling Information - Conventional Parameters SEE ATTACHMENT NO. 4**

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT, OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data							Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)												
d. Total Dissolved Solids (TDS)												
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as-N)												
i. Flow	Value		Value		Value					Value		
j. Temperature, winter	Value		Value		Value				DEGREES CELSIUS (°C)	Value		
k. Temperature, summer	Value		Value		Value				DEGREES CELSIUS (°C)	Value		
l. pH	Minimum	Maximum	Minimum	Maximum					STANDARD UNITS	Minimum	Maximum	

**2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

a. Primary Industries: i. Does the discharge from this outfall contain process wastewater?

Yes - Go to Item ii. below.  
 No - Go to Item b. below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles:

Acid:  Base/Neutral:  Pesticide:

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?

Yes - Concentration and mass data attached. SEE ATTACHMENT NO. 4  
 No - Go to Item ii. below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?

Yes - Source or reason for presence in discharge attached  
 Yes - Quantitative or qualitative data attached SEE ATTACHMENT NO. 4  
 No

**INDUSTRIAL APPLICATION FORM NY-2C**  
Section III - Sampling Information

Facility Name: **Astoria Generating Station**

SPDES No.: **NY-0005118**

Outfall No.: **001A**

**3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. **SEE ATTACHMENT NO. 4**

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Pollutant and CAS Number	Effluent data						Units		Intake data (optional)		Believed present, no sampling results available		
	a: Maximum daily value		b: Maximum 30 day value (if available)		c: Long term average value (if available)		d: Number of analyses	a: Concentration	b: Mass	a: Long term average value		d: Number of analyses	
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration			(2) Mass
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													



State Pollutant Discharge Elimination System (SPDES)  
**INDUSTRIAL APPLICATION FORM NY-2C**  
 For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water  
**Section II - Outfall Information**  
 Please type or print the requested information.

Facility Name: <b>Astoria Generating Station</b>	SPDES Number: <b>NY-0005118</b>
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**1. Outfall Number and Location**

Outfall No.: <b>001G</b>		
Latitude <b>40 ° 47 ' 18 "</b>	Longitude <b>73 ° 54 ' 50 "</b>	Receiving Water: <b>East River via Outfall 001</b>

**2. Type of Discharge and Discharge Rate** (List all information applicable to this outfall)

	Volume/ Flow	Units				Volume/ Flow	Units		
		MGD	GPM	Other (specify)			MGD	GPM	Other (specify)
a. Process Wastewater					f. Noncontact Cooling Water Blowdown	<b>0.54*</b>	<b>X</b>		<b>AVG</b>
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water				
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify):									
Other discharge (specify):									

\*Flow is apportioned 43% to Unit 5 (001A) 9 cell tower and 57% to Unit 4 (001G) 12 cell tower.

**3. List process information for the Process Wastewater streams identified in 2.a-d above: N/A**

a. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
b. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
c. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		
d. Name of the process contributing to the discharge			Process SIC code: 
Describe the contributing process	Category	Quantity per day	Units of measure
	Subcategory		

**Expected or Proposed Discharge Flow Rates for this outfall:**

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
<b>20 MG</b>	<b>0.41 MGD</b>	<b>0.54 MGD</b>	<b>0.7 MGD</b>	<b>0.7 (+) MGD</b>

**INDUSTRIAL APPLICATION FORM NY-2C**  
Section II - Outfall Information

Facility Name: <b>Astoria Generating Station</b>	Outfall No.: <b>001G</b>
	SPDES Number: <b>NY-0005118</b>

**5. Is this a seasonal discharge?**

YES - Complete the following table.

NO - Go to Item 6 below.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day		Total volume per discharge	Units	Duration (Days)
			LTA	Daily Max			

**6. Water Supply Source** (indicate all that apply)

	Name or owner of water supply source	Volume or flow	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)*	East River	10.49 (AVG)	X MGD	GPD	GPM

\*See note under Section 2, No. 2 F.

**7. Outfall configuration: (Surface water discharges only) NOT A SURFACE WATER DISCHARGE**

**A. Where is the discharge point located with respect to the receiving water?**

In the streambank:

In the stream:

Within a lake or ponded water:

Within an estuary:  Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser:  Attach description, including configuration and plan drawing of diffuser, if used.

**B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?**

10%     25%     50%     Other

**C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:**

Stream width	Stream depth	Stream velocity	Are the results of a mixing/diffusion study attached?	<input type="checkbox"/> YES
Feet	Feet	Feet/Sec		<input type="checkbox"/> NO

**Section II - Outfall Information**

Outfall No.: 001G

Facility Name: **Astoria Generating Station**

SPDES Number: NY-0005118

**8. Thermal Discharge Criteria - DISCHARGES TO OUTFALL 001 WHICH DISCHARGES TO THE EAST RIVER**

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

YES - Complete the following table.

Information on the intake and discharge configuration of this outfall is attached.

NO - Go to Item 9. below.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To	MGD	

**9. Are any water treatment chemicals or additives that are used by your facility subsequently discharged through this outfall?**

YES - Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

NO - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name
Ashland	Amercor 8780	Kramer	Caustic Soda
Ashland	Amercor 8755	Kramer	Disodium Phosphate
Nalco	Acti-Brom 1338	Ashland	Adjunct B
Manley-Regan	Sodium Hypochlorite	Ashland Chemical	Drewspers 747A
Ashland	Mekor 6701	To Be Determined*	Sulfuric Acid*
Betzdearborn	Spectrus CT 1300		
Betzdearborn	Spectrus DT 1400		

*\*Proposed NEW Chemical*

**10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?**

YES - Complete the following table.

NO - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	



**INDUSTRIAL APPLICATION FORM NY-2C  
Section III - Sampling Information**

Facility Name: **Astoria Generating Station**

SPDES No.: **NY-0005118**

Outfall No.: **001G**

**1. Sampling Information - Conventional Parameters SEE ATTACHMENT NO. 4**

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data								Units		Intake data (optional)	
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	e. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand, 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)												
d. Total Dissolved Solids (TDS)												
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as N)												
i. Flow	Value		Value		Value					Value		
j. Temperature, winter	Value		Value		Value			DEGREES CELSIUS (°C)		Value		
k. Temperature, summer	Value		Value		Value			DEGREES CELSIUS (°C)		Value		
l. pH	Minimum	Maximum	Minimum	Maximum				STANDARD UNITS		Minimum	Maximum	

**2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

a. Primary Industries: i. Does the discharge from this outfall contain process wastewater?

Yes - Go to Item ii. below.  
 No - Go to Item b. below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles:  Acid:  Base/Neutral:  Pesticide:

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?

Yes - Concentration and mass data attached. **SEE ATTACHMENT NO. 4**  
 No - Go to Item ii. below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?

Yes - Source or reason for presence in discharge attached  
 Yes - Quantitative or qualitative data attached **SEE ATTACHMENT NO. 4**  
 No

### INDUSTRIAL APPLICATION FORM NY-2C Section III - Sampling Information

Facility Name: <b>Astoria Generating Station</b>	SPDES No.: <b>NY-0005118</b>
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Outfall No.: <b>001G</b>
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**3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances**

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. **SEE ATTACHMENT NO. 4**

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.f. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Pollutant and CAS Number	Effluent data						Units		Intake data (optional)		Believed present, no sampling results available		
	a: Maximum daily value		b: Maximum 30-day value (if available)		c: Long term average value (if available)		d: Number of analyses	a: Concentration	b: Mass	a: Long term average value		d: Number of analyses	
	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass	(1) Concentration	(2) Mass				(1) Concentration			(2) Mass
CAS Number:													
CAS Number:													
CAS Number:													
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