



PSEG Public Service
Electric and Gas
Company

80 Park Plaza, Newark, NJ 07101 / 201 430-8217 MAILING ADDRESS / P.O. Box 570, Newark, NJ 07101

Robert L. Mittl General Manager
Nuclear Assurance and Regulation

March 15, 1985

Director of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, MD 20814

Attention: Mr. Albert Schwencer, Chief
Licensing Branch 2
Division of Licensing

Gentlemen:

DISCHARGE WATER QUALITY
HOPE CREEK GENERATING STATION

Pursuant to the recent telephone conversation between
Mr. D. Wagner and Mr. E. Nemeth, enclosed please find the
following documents you requested:

1. 1975 Hope Creek Generating Station National
Pollutant Discharge Elimination Permit (NPDES)
2. 1974 C.P. Stage Water Quality Certificate
(Section 401)
3. 1984 NJPDES Renewal (Revised) Application for HCGS

It is our understanding that the above documents will enable
you to proceed with your review of the discharge water
quality aspects of Hope Creek, including any timely input
you may request from the NJDEP, in support of your consid-
eration of our Operating License application. It is also
our understanding since a 401 permit was issued for HCGS at
the C.P. Stage, a second water quality certificate is not
required at this time.

If you have any questions, please contact Mr. Nemeth at
(201)430-8423.

Very truly yours,

8503200455 850315
PDR ADOCK 05000354
PDR

Enclosure

C D. H. Wagner
USNRC Licensing Project
Manager (w/o attachments)

Cool
1/1

The Energy People
LE 16-1

Director of Nuclear
Reactor Regulation

2

3/15/85

BC General Manager - Environmental Affairs
Manager - Licensing and Analysis
Manager - Environmental Licensing
Project Licensing Manager - Hope Creek
E. J. Nemeth
CARMS

IL 16 3



PSEG Public Service
Electric and Gas
Company

EBS

80 Park Plaza, Newark, NJ 07101 / 201 430-5858 MAILING ADDRESS / P.O. Box 570, Newark, NJ 07101

James A. Shissias General Manager
Environmental Affairs

May 9, 1984

Mr. Paul J. Kurisko, P.E., Chief
Bureau of Industrial Waste Management
New Jersey Department of Environmental Protection
Division of Water Resources
CN-029
Trenton, New Jersey 08625

Dear Mr. Kurisko:

REVISED NJPDES-DSW RENEWAL APPLICATION
HOPE CREEK GENERATING STATION - NJPDES PERMIT NO. NJ0025411
PUBLIC SERVICE ELECTRIC AND GAS COMPANY

Attached is the revised NJPDES-DSW Renewal Application for Hope Creek Generating Station (NJ0025411). As per our previous discussions, this revised application replaces the original renewal application (submitted on October 1, 1979). It reflects:

- 1) a single unit generating station versus the original two unit design;
- 2) a changed low volume waste system which will treat boiler blowdown and potentially oily wastes;
- 3) An added settling pond which treats metal cleaning wastes during plant startup (flushing operations);
- 4) a liquid radioactive waste system which removes radioactive isotopes from certain liquid waste streams;
- 5) new anticipated flows and characteristics of the cooling tower blowdown and sewage treatment plant, and;
- 6) storm drains.

Data for systems in operation are based on information gathered under a full range of operating conditions. Data for each discharge not yet in operation represent anticipated "steady-state" conditions for that system.

P. Kurisko
Page 2
May 9, 1984

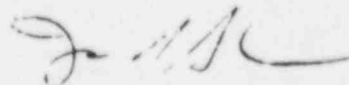
In order for PSE&G to meet its construction schedule, two specific areas need to be addressed immediately. The first pertains to a Nuclear Regulatory Commission (NRC) Regulation, 10 CFR 51.20 (c), requiring the Company to obtain a 401(a) Water Quality Certification as a prerequisite to the NRC Operating License.

A Water Quality Certification was obtained by PSE&G on May 8, 1974 (refer to attachment A) for the construction phase of the Hope Creek Plant. However, that was prior to the State's assuming the administrative authority for the NPDES program. We have discussed this matter with Mr. Stephen Schlags of the NJDEP's Bureau of Planning and Standards - Monitoring and Planning Element. In his opinion, the issuance of the NJPDES DSW permit may in itself comprise the Water Quality Certification. If this is the case, PSE&G requests a letter stating as such, otherwise please contact me so we can discuss this further.

The second area concerns the low volume waste system's stage 2 treatment works waiver (issued December 9, 1983) which restricts the start of its construction until a final draft NJPDES permit is issued. Concerning this restriction, we request your assistance in determining a mechanism to expedite the approval for construction of this treatment works system (i.e., perhaps a "Letter of Clarification" or a further waiver of the construction constraints). PSE&G's construction schedule calls for construction to begin on this system by June 15, 1984.

If you have any questions on this application or the items addressed above, please contact either Eric Nemeth at (201) 430-8423 or Eric Svenson (201) 430-5860.

Sincerely,





13150
+2956

Public Service Electric and Gas Company 80 Park Place Newark, N.J. 07101 Phone 201/622-7000

May 24, 1974

U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10007

Attention: Mr. Ernest A. Regna, Chief
Industrial Water Facilities Branch
Facilities Technology Division

Gentlemen:

NPDES PERMIT APPLICATION NO. NJ 0025411
HOPE CREEK GENERATING STATION
LOWER ALLOWAYS CREEK TOWNSHIP
SALEM COUNTY, NEW JERSEY

In accordance with Section 401(a) of the Federal Water Pollution Control Act Amendments of 1972, enclosed please find copies of letters dated May 1, 1974 and May 8, 1974 from the State of New Jersey Department of Environmental Protection issuing water quality certification to the Hope Creek Generating Station, NPDES application number NJ 0025411.

Very truly yours,

F. W. Schneider
Manager of Engineering
Electric Engineering Department

The Energy People



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
P. O. BOX X362 2809
TRENTON, NEW JERSEY 08628

May 8, 1974

F.W. Schneider, Manager of Engineering
Public Service Electric and Gas Company
80 Park Place
Newark, New Jersey 07101

Re: Hope Creek Generating Station
Units No. 1 & 2
Lower Alloways Creek Township
Salem County, New Jersey

Dear Mr. Schneider:

The following is offered as an amendment to the water quality certificate issued by this Department on May 1, 1974:

This is to further certify that to our knowledge there are no applicable Federal effluent limitations established pursuant to the Federal Water Pollution Control Act Amendments of 1972 under Sections 301(b) and 302 nor are there any applicable Federal standards under Sections 306 and 307 of the Act.

Very truly yours,

Thomas F. Harding
Project Manager, Permits
Bureau of Water Pollution Control

E36:C:A21



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
P. O. BOX 2809
TRENTON, NEW JERSEY 08625

May 1, 1974

Public Service Electric and Gas Co.
80 Park Place
Newark, New Jersey 07101

Re: Nos. 1 and 2 Units, Hope Creek Generating Station
Lower Alloways Creek Township, Salem County, N.J.
Applicant - Public Service Electric and Gas Co.

Gentlemen:

This is to certify in accordance with the provisions of Section 401 (a) (1), "Federal Water Pollution Control Act Amendments of 1972" that there is reasonable assurance as determined by the Department of Environmental Protection of the State of New Jersey that the proposed activity, as described above, will be conducted in a manner which will not violate applicable water quality standards of the State of New Jersey.

The foregoing applies only and exclusively to the effect the proposed work would have on water quality as defined in the regulations establishing certain classifications to be assigned to the waters of this State and standards of quality to be maintained in waters so classified. The certification does not apply to broader ecological, biological, or environmental effects which may result from the project, nor does this certificate evaluate the degree of public interest the project may further.

Very truly yours,

Ernest R. Segesser
(BR)

Ernest R. Segesser
Assistant Director for Water Quality

6E11:A1

cc: Mr. Paul McDowell
Bureau of Navigation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10007

J. A. [unclear]	
Noted [unclear]	
LTB	LTB
ENG	ENG
LI	LI
ELWS	ELWS
ELWS	ELWS

cc sent
orig

Rev info

July 1, 1975

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. L. Mill
General Manager-Projects
Engineering and Construction Dept.
P.S.E. & Gas Co.
60 Park Place
Newark, New Jersey 07101

Re: Public Service Electric and Gas Co.
Permit No. NJ 0025411

Dear Mr. Mill:

Pursuant to authority granted by Section 1342 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 991251-1376, the Regional Administrator for Region II of the United States Environmental Protection Agency has made a final determination to issue a National Pollutant Discharge Elimination System (NPDES) permit for the above-indicated facility.

Thank you for your comment concerning this permit. All such comments received have been considered by EPA in making this final determination.

Enclosed you will find the final determination referred to above. Please read the final determination carefully, since it may contain changes from the Draft Permit concerning which Public Notice was given. Also enclosed is a copy of a memorandum prepared by the EPA staff. This memorandum addresses all comments received concerning this NPDES permit and explains this Agency's position on the issues raised by those comments. I am certain this memorandum will assist you in understanding EPA's final determination with regard to this permit.

The enclosed final determination will become a final NPDES permit, issued and effective in its entirety, and a legal requirement of the permittee on the date indicated unless a request for

Enclosed documents
marked

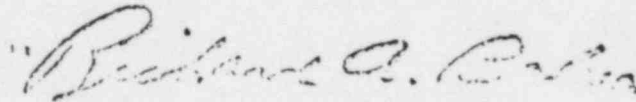
61

COMMUNICATIONS SECTION
RECEIVED
JUL 1 1975
NEW YORK

an Adjudicatory Hearing is granted pursuant to the provisions of Title 40, Section 125 of the Code of Federal Regulations, as amended, 39 Federal Register 143, pp. 27079-27084 (July 24, 1974).

Your cooperation in the NPDES program is appreciated.

Sincerely yours,



Chief
Status of Compliance Branch
Enforcement and Regional Counsel Division

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION II
 26 FEDERAL PLAZA
 NEW YORK, NEW YORK 10007

EPA

June 24, 1977

Mr. R. L. Mittl
 General Manager
 Projects, Engineering and Construction
 Public Service Electric and Gas Company
 80 Park Place
 Newark, New Jersey 07101

General Manager
 Licensing and Environment
 R. L. MITTL

NOTED _____

JUN 29 1977

Re: Settlement of Adjudicatory Hearing,
 Hope Creek Generating Station,
 Lower Alloways Creek Township,
 New Jersey

REFER TO JTB-orig
 FWR EJM EAL
 RPD XCR-CC
 COPIES RLM FILE _____

Permit No.: NJ 002 5411
 Docket No.: II-WP-75-118

Dear Mr. Mittl:

Enclosed please find a copy of the executed stipulation in settlement of the above-referenced Adjudicatory Hearing. You will also find enclosed modified permit pages prepared in accordance with the provisions of the stipulation. Kindly take note that the enclosed permit pages are deemed to have superseded the pages of your original final NPDES permit as of June 24, 1977. Accordingly, you should insert the new pages at the appropriate locations in your permit and mark the replaced pages as superseded, so that no confusion will result, and so that you will maintain a record of the previously effective terms and conditions of the permit.

Please be advised that the terms and conditions of your modified NPDES permit are effective and enforceable against Public Service Electric and Gas Company as of June 24, 1977. The effluent and thermal limitations and sampling schedules and monitoring requirements of this permit should be noted and strictly complied with.

I wish to thank you for your kind cooperation throughout the settlement of this case, and I look forward to the continuing compliance by Public Service Electric and Gas Company with the terms and conditions of its NPDES permit for the Hope Creek Station.

Sincerely yours,

Henry Ziluckstern
 Henry Ziluckstern
 Attorney
 Enforcement Division

Enclosures

PROJECT LICENSING MANAGER	
HOPE CREEK	
J. C. RECKNAGEL	
JUN 27 1977	
NOTED	<i>[Signature]</i>
FILED IN	
APPROVED	<i>[Signature]</i>
FILED	<i>[Signature]</i>

*W. H. / Use P
 [Handwritten notes]*

cc: (with enclosures)

Helen Lee
Regional Hearing Clerk

Jed Z. Callen
Office of Regulatory Affairs
New Jersey Department of
Environmental Protection
Box 2809
Trenton, New Jersey 08625

Permit No.: NJ0025411

Name of Permittee: Public Service
Electric and Gas Co., Hope Creek
Generating Station

Effective Date: July 31, 1975

Expiration Date: July 31, 1980

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
DISCHARGE PERMIT

In reference to the above application for a permit authorizing the discharge of pollutants in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972 (33 U.S.C. 1251-1376) (hereinafter referred to as "the Act"), Public Service Electric and Gas Co., 80 Park Place, Newark, New Jersey, 07101

(hereinafter referred to as "the Permittee")

is authorized by the Regional Administrator, Region II, U.S. Environmental Protection Agency to discharge from the Hope Creek Generating Station, Artificial Island, Lower Alloways Creek Township, New Jersey

to the Delaware River

in accordance with the following conditions.

1. All discharges authorized herein shall be consistent with the terms and conditions of this permit; facility expansions, production increases or process modifications which result in new or increased discharges of pollutants must be reported by submission of a new NPDES application, or if such new or increased discharge does not violate the effluent limitations specified in this permit, by submission to the Regional Administrator of notice of such new or increased discharges of pollutants; the discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.
2. After notice and opportunity for a public hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - a. violation of any terms or conditions of this permit;
 - b. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
 - c. a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
3. Notwithstanding Condition 2 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which, as a result of plant operation, is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, the Regional Administrator shall revise or modify this permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.
4. The permittee shall allow the Regional Administrator or his authorized representative and/or the authorized representative of the State water pollution control agency, in the case of non-Federal facilities, upon the presentation of his credentials:
 - a. to enter upon the permittee's premises in which an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - b. to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit;
 - c. to inspect at reasonable times any monitoring equipment or monitoring method required by this permit;
 - d. to sample at reasonable times any discharge of pollutants;

5. The permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or systems of treatment or control installed or utilized by the permittee to achieve compliance with the terms and conditions of this permit.
6. The issuance of this permit does not convey any property rights either in real estate or material, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of rights, nor any infringement of Federal, State or local laws or regulations; nor does it obviate the necessity of obtaining State or local assent required by law for the discharge authorized.
7. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.
8. The specific effluent limitations and other pollution controls applicable to the discharge permitted herein are set forth in the following conditions. The following conditions also set forth self-monitoring and reporting requirements. Unless otherwise specified, the permittee shall submit duplicate original copies of all reports to the head of the State water pollution control agency and the Regional Administrator. Except for data determined to be confidential under Section 308 of the Act, all such reports shall be available for public inspection at the office of the Regional Administrator. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

9. General Limitations

a. Except as specifically authorized in this permit, the permittee shall not discharge floating solids attributable to plant operations.

b. Initial Limitations - The following conditions apply on the effective date of this permit and last for the duration of the permit:

(1) The permittee shall discharge condenser cooling water effluents such that the following conditions are satisfied:

<u>Discharge Serial No.</u>	<u>Effluent Limit</u>
461	(a) The discharge temperature shall not exceed 35.6°C (96.0°F).
	(b) The net rate of addition of heat* to the receiving water shall not exceed: (1) 170.29 million Kcal./hr. (675.25 million BTU/hr.) in the winter (October-May). (2) 120 million Kcal./hr. (475 million BTU/hr.) in the summer (June-September).
	(c) The discharge induced temperature increase above ambient temperature shall not exceed 4°F (2.2°C) from September to May and 1.5°F (0.8°C) from June to August, or a maximum of 86°F (30.0°C), whichever is less**.

*The net rate of addition of heat is determined by the product of the heat capacity, discharge flow and discharge-intake temperature difference.

**These temperatures shall be measured outside of the heat dissipation area designated by the Delaware River Basin Commission.

General Limitations (continued)

<u>Discharge Serial No.</u>	<u>Effluent Limit</u>
461	(d) There shall be no discharge of heat from the main condensers of the Hope Creek Generating Station except heat may be discharged in blowdown from recirculated cooling water systems provided the temperature at which the blowdown is discharged does not exceed at any time the lowest temperature of recirculated cooling water prior to the addition of make-up water.
	(e) Concentrations of free available chlorine in waste water discharged from non-recirculating and recirculating cooling water systems shall not exceed an average of 0.2 mg/l and an instantaneous maximum of 0.5 mg/l.
	(f) The pH shall not be less than 6.0 nor greater than 9.0 at any time.***

(2) The permittee shall discharge effluents from Discharge 462B such that the concentration of BOD-5 Day shall not exceed 25 mg/l or 1.82 kg/day (4lbs/day), whichever is less.

***When the intake pH is less than 6.0, the discharge pH shall not be less than the intake pH; when the intake pH is greater than 9.0, the discharge pH shall not exceed the intake pH. ? into ?

10. Monitoring and Recording.

The permittee shall monitor and record the quantitative values of each discharge according to the following schedule and other provisions. For each discharge and for each Sampling Schedule listed below, the flow (in gallons per day) shall be measured.* Where net values are listed in Condition 9(b) the surface water intake is to be sampled with the same frequency and type of sample as specified below for each required parameter.

- a. Sampling Schedule for Condenser and Service Cooling Water Discharge
(Discharge Serial No. 461)*** - The following sampling schedule shall begin within 4 months of commencement of the discharge and last for the duration of the permit:

<u>Parameter</u>	<u>Minimum Freq. of Analysis</u>	<u>Sample Type</u>
Discharge temperature	Continuous	
Intake temperature	Continuous	
pH	Twice Weekly	Grab**
Free Available Chlorine	Continuous during Chlorination periods****	

*The flow of cooling tower blowdown shall be monitored and recorded by continuously recording the operating mode of the service water pumps and by continuously monitoring the parameters necessary to calculate the cooling tower blowdown rate; for all other discharges of internal waste streams (only those which are limited), the flow shall be measured and recorded at a frequency coinciding with the most frequently sampled parameter. Methods, equipment, installation and procedures shall conform to those prescribed in the Water Measurement Manual, U.S. Department of the Interior, Bureau of Reclamation, Washington, D.C. 1967.

**Grab samples only shall be taken for analysis of dissolved oxygen, oil and grease, pH and any bacteriological analysis. Care shall be exercised when collecting a composite sample such that the proper preservative is present in the sample container during sample collection. Depending on the analysis to be conducted, several different containers and preservation techniques may be required. Samples shall be analyzed as quickly as possible after collection and in no case shall the maximum holding time exceed that contained in the references cited in Condition 10(f).

***Cooling tower discharges are to be monitored prior to combination with the cold water bypass.

****Not later than 15 (fifteen) months after the commencement of operation of Unit 1, the permittee shall submit to EPA, Region II a report on chlorine monitoring experience at the facility. If the results of that report demonstrate to the Regional Administrator that the Hope Creek Generating units cannot operate at or below this level of residual free chlorine, the effluent limitation in Condition 9(b)(1)(e) may be modified.

- (b) Sampling Schedule for the Sewage Plant Discharge (Discharge Serial No. 4676) - The following sampling schedule shall begin within 4 months of commencement of the discharge and last for the duration of the permit.

<u>Parameter</u>	<u>Minimum Freq. of Analysis</u>	<u>Sample Type</u>
BOD-5 Day	Monthly	Grab

(c) Modifications to Sampling Schedules

The permittee may submit for approval an alternate schedule(s) to account for any realignment of discharges, for substitutions of parameters to be sampled, for analytical and sampling methods to be utilized, for realignment of sampling locations so that concentrations to be measured are within reliable sensitivity ranges of the analytical techniques, and for the compositing by volume of individual discharge samples to make a single plant sample. With regard to substituting parameters such as TOC or COD for BOD, the permittee shall provide test data to support the correlation between the parameters.

If the permittee monitors any pollutant more frequently than is required by this permit, he shall include the results of such monitoring in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA Form 3320-1 (10-72)) in Condition 10 (g). Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

(d) Quality Control

Adequate care shall be maintained in obtaining, recording, and reporting the required data on effluent quality and quantity, so that the precision and accuracy of the data will be equal to or better than that achieved by the prescribed standard analytical procedures.

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at sufficiently frequent intervals to ensure accuracy of measurements.

Sampling shall be representative of the volume and quality of effluent discharged over the sampling and reporting period.

The permittee is responsible for assuring that the methodology used is reliable for their specific wastes in their laboratory. The permittee must be able to demonstrate to the Regional Administrator that they have a viable quality control program.

(e) Recording

The permittee shall maintain and record the results of all required analyses and measurements and shall record, for all samples, the date and time of sampling, the sample method used, the dates analyses were performed, who performed the sampling and analyses, and the results of such analyses.

All records shall be retained for a minimum of 3 years, such a period to be extended during the course of any unresolved litigation or when so requested by the Regional Administrator. The permittee also shall retain all original stripchart recordings from any continuous monitoring instrumentation and any calibration and maintenance records for a minimum of 3 years, such period to be extended during the course of any unresolved litigation or when so requested by the Regional Administrator.

The permittee shall provide the above records and shall demonstrate the adequacy of the flow measuring and sampling methods upon request of the Regional Administrator. The permittee shall identify the effluent sampling point used for each discharge pipe by providing a sketch or flow diagram, as appropriate, showing the locations.

(c) Sampling and Analysis

All sampling and analytical methods used to meet the monitoring requirements specified above shall conform to guidelines establishing test procedures for the analysis of pollutants, published pursuant to Section 304(g) of the Federal Water Pollution Control Act, as amended. If the Section 304(g) guidelines do not specify test procedures for any pollutants required to be monitored by this permit and until such guidelines are promulgated, sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless otherwise specified by the Regional Administrator, conform to the latest edition of the following references:

Standard Methods for the Examination of Water and Wastewaters, 15th Edition, 1971 American Public Health Association, New York, New York 10019.

A. S. T. M. Standards, Part 23, Water; Atmospheric Analysis, 1972, American Society for Testing and Materials, Philadelphia, Pennsylvania 19103.

W. Q. O. Methods for Chemical Analysis of Water and Wastes, April 1971, Environmental Protection Agency, Water Quality Office, Analytical Quality Control Laboratory, NERC, 1014 Broadway, Cincinnati, Ohio 45208.

(e) Reporting

The results of the above monitoring requirements shall be reported by the permittee in the units specified in Condition 9(b). A report or a written statement shall be submitted even if no discharge occurred during the reporting period. A report shall also be submitted if there have been any modifications in the waste collection, treatment, and disposal facilities, changes in operations procedures, or other significant activities which alter the quality and quantity of the discharges or otherwise concern these Conditions. Permanent elimination of a discharge shall be promptly reported by the permittee in writing to the Regional Administrator.

The permittee shall include in this report any previously approved non-standard analytical methods used. Copies of the report shall be sent to both the Regional Administrator and the State Agency on the 10th of each month reporting the monitoring data from the previous month. A Discharge Monitoring Report Form [EPA Form 3320-1 (10-72)] shall be used for reporting.

11. Sludge Disposal.

Collected screenings, sludges, and other solids and precipitates separated from the permittee's discharges authorized by this permit and/or intake or supply water by the permittee shall be disposed of in such a manner as to prevent entry of such materials into navigable waters or their tributaries. Any live fish, shellfish, or other animals collected or trapped as a result of intake water screening or treatment may be returned to their water body habitat. The permittee shall report on all effluent screenings, sludges and other solids associated with the discharge herein described. The following data shall be reported quarterly together with the monitoring data required in Condition 10:

- a. the method by which they were removed and transported;
- b. their final disposal locations.

12. Discharge Containing Parameter Not Previously Reported.

The permittee shall not discharge any wastewater containing a substance or characterized by a parameter which was indicated as absent in its NPDES Permit Application. In the event of such a discharge, the permittee shall notify the Regional Administrator and the State Agency prior to the discharge.

13. Non-Compliance with Conditions.

- a. In the event the permittee is unable to comply with any of these conditions, due, among other reasons, to:

- (1) breakdown of waste treatment equipment, (biological and physical-chemical systems including, but not limited to, all pipes, transfer pumps, compressors, collection ponds or tanks for the segregation of treated or untreated wastes, ion exchange columns, or carbon absorption units);
- (2) accidents caused by human error or negligence; or
- (3) other causes, such as acts of nature,

the permittee shall notify the Regional Administrator, the Chief, Status of Compliance Branch, EPA, Region II, and the State Agency within 24 hours by telephone and in writing within ten (10) days.

b. The written notification shall include the following pertinent information:

- (1) cause of noncompliance;
- (2) a description of the noncomplying discharge including its impact upon the receiving waters;
- (3) anticipated time the condition of noncompliance is expected to continue, or if such condition has been corrected, the duration of the period of noncompliance;
- (4) steps taken by the permittee to reduce and eliminate the noncomplying discharge; and,
- (5) steps to be taken by the permittee to prevent recurrence of the condition of noncompliance.

Permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitation specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

Nothing in this permit shall be construed to relieve the permittee from appropriate civil or criminal penalties for non-compliance.

14. Bypass Provision.

Any diversion from, or bypass of, facilities necessary to maintain compliance with terms and conditions of this permit is prohibited, except (1) where unavoidable to prevent loss of life or severe property damage; or (2) where excessive storm drainage or runoff would damage any facility necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Regional Administrator and the State Agency in writing of each such diversion or bypass within 48 hours of its occurrence.

15. Authorized Signature for Reporting Requirements.

All reports required to be submitted by a corporation must be signed by a principal executive officer of at least the level of vice president, or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application form originates. In the case of a partnership or a sole proprietorship, all reports must be signed by a general partner or the proprietor respectively. In the case of a municipal, State, Federal or other public facility, the application must be signed by either a principal executive officer, ranking elected official or other duly authorized employee.

DEFINITIONS

Regional Administrator: Regional Administrator
 Region II
 Environmental Protection Agency
 26 Federal Plaza
 New York, New York 10007
 ATTN: Status of Compliance Branch

State Certifying Agency: Assistant Director for Operations and Enforcement
 Division of Water Resources
 N.J. Department of Environmental Protection
 P.O. Box 2809
 Trenton, New Jersey 08625

Daily - each operating day.

Weekly - every seventh day (the same day each week) and a normal operating day.

Monthly - one day each month (the same day each month) and a normal operating day. (i.e. the 2nd Tuesday of each month)

Net - the amount of a pollutant contained in the discharge measured in appropriate units as specified herein, less the amount of a pollutant contained in the surface water body intake source, measured in the same units, over the same period of time

1. The intake source must be the same water body that is being discharged to
2. In cases where the surface water body intake source is pretreated for the removal of pollutants, the intake level of a pollutant to be used in calculating the net, is that level contained after the pretreatment step

Composite - a combination of individual (or continuously taken) samples obtained at regular intervals over the entire discharge day. The volume of each sample shall be proportional to the discharge flow rate. For a continuous discharge, a minimum of 24 individual grab samples (at hourly intervals) shall be collected and combined to constitute a 24-hour composite sample. For intermittent discharges of 4 - 8 hours duration, grab samples shall be taken at a minimum of 30 minute intervals. For intermittent discharges of less than 4 hours duration grab samples shall be taken at a minimum of 15 minute intervals.

Gross - the poundage contained in the discharge. (Gross applies when the intake source is a municipal or private water supply, ground water, or a surface water body other than the one being discharged to.)

Grab - an individual sample collected in less than 15 minutes.

This permit and the authorization to discharge shall be binding upon the permittee and any successors in interest of the permittee and shall expire on July 31, 1989. The permittee shall not discharge after the above date of expiration. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue NPDES permits no later than 180 days prior to the above date of expiration.

By authority of _____ Gerald M. Hansler, P. E.
(Regional Administrator)

JUN 27 1975

Meyer Scolnick

Meyer Scolnick, Director
Enforcement and Regional
Counsel Division

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 Federal Plaza
New York, New York 10007

-----x
In the Matter of :
National Pollutant Discharge Elimination :
System Permit for :
Public Service Electric and Gas Company, : Docket No.: II-WP-75-118
Newark, New Jersey :
Permit No.: :
NJ 002 5411 (Hope Creek Generating Station) :
-----x

STIPULATION

Public Service Electric and Gas Company (hereinafter, "the permittee"), and the United States Environmental Protection Agency (EPA), hereby stipulate and agree as follows with regard to the above-referenced administrative action:

(1) The permittee hereby withdraws its request for an Adjudicatory Hearing on all issues, subject to the conditions set forth below.

(2) The National Pollutant Discharge Elimination System (NPDES) permit which is the subject of this proceeding shall be modified as set forth herein:

A. Condition 3 shall be modified to read as follows:

3. Notwithstanding Condition 2 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of

the Act for a toxic pollutant which, as a result of plant operation, is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, the Regional Administrator shall revise or modify the permit in accordance with the toxic effluent standard or prohibition and so notify the permittee.

B. Condition 9 shall be modified to read as follows:

9. GENERAL LIMITATIONS

a. Except as specifically authorized in this permit, the permittee shall not discharge floating solids attributable to plant operations.

C. The second sentence of Condition 9.b.(1)(c) shall be deleted.

D. A triple asterisk (***) , referring to the triple asterisked footnote following Condition 9.b.(2), shall be added following Condition 9.b.(1)(f).

E. The monitoring requirement for Free Available Chlorine in Condition 10.a. shall be modified to read as follows:

Free Available Chlorine

Continuous during
chlorination periods****

*** Not later than 15 (FIFTEEN) months after the commencement of operation of Unit 1, the permittee will submit to EPA Region II a report on chlorine monitoring experience at the facility. If the results of that report demonstrate to the Regional Administrator that the Hope Creek generating units cannot operate at or below this level of residual free available chlorine, the effluent limitation in Condition 9.b.(1)(c) may be modified.

F. In Condition 11. the reference in the last sentence of the first paragraph to "Condition 12" shall be changed to read "Condition 10."

G. In recognition of the unique nature of the effluent from the Hope Creek Generating Station, the conclusion of the last sentence in Condition 13.a. shall be modified to read as follows: "...the permittee shall notify the Regional Administrator, the Chief, Status of Compliance Branch, EPA Region II, and the State Agency within 24 hours by telephone and in writing within ten days."

H. Condition 14, "Bypass Provision," shall be modified to read as follows:

Any diversion from, or bypass of, facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (1) where unavoidable to prevent loss of life or severe property damage; or (2) where excessive storm drainage or runoff would damage any facility necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Regional Administrator and the State Agency in writing of each such diversion or bypass within 48 hours of its occurrence.

I. Condition 16, Radioactive Substances, shall be deleted.

(3) The New Jersey Department of Environmental Protection (NJDEP) by signing this stipulation, exercises its right to recertify the amended permits resulting from this stipulation, pursuant to 33 U.S.C. §1341 and regulations promulgated thereunder at 40 CFR §125.32(e)(8)(vi). NJDEP is not a party to this stipulation.

(4) The final NPDES permits issued as a result of this stipulation shall have required chemical limitations and monitoring schedules modified in accordance with the revised permit pages, which are attached hereto and made a part hereof.

(5) This stipulation and attendant modifications to the issued NPDES permits to which it refers, as embodied in the attached modified permit pages, shall be in full force and

effect from and after the execution of this stipulation by the Director, Enforcement Division, EPA Region II, who shall be the last signatory to this stipulation.

(6) There are no parties to this stipulation other than the United States Environmental Protection Agency and Public Service Electric and Gas Company.

Dated by the last signatory hereto:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Public Service Electric and Gas Company

New Jersey Department of Environmental Protection

United States Environmental Protection Agency

June 24, 1977

Robert A. Emmett
By: Robert A. Emmett
Office of Water Enforcement

Robert L. Mittl
By: Robert L. Mittl
General Manager-Licensing and Environment

John J. Jirikson
By: John J. Jirikson
Acting Director

Meyer Golnick
By: Meyer Golnick
Director
Enforcement Division

CP-1 1 wgn-1



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

STANDARD APPLICATION FORM (CP # 1)
CONSTRUCTION AND DISCHARGE PERMITS

FOR OFFICIAL USE

READ REQUIREMENTS
PLEASE TYPE OR PRINT

1. Applicant/Owner* Public Service Electric and Gas Company Telephone (201) 430-7000
 Permanent Legal Address 80 Park Plaza
 City or Town Newark State New Jersey Zip Code 07101
2. Location of Work Site Artificial Island
 Name of Facility, if applicable Hope Creek Generating Station
 Street/Road Foot of Buttonwood Road (Artificial Island)
 Lot No. 1-P Block No. 26
 City or Town Lower Alloways Creek Township State New Jersey Zip Code _____
 Municipality _____ County Salem
3. If applicable, give name of: Engineer/Surveyor/Well Driller/Geologist/Soil Scientist (Specify).
 Name _____ N.J. License No. _____
 Name of Firm, if employee Public Service Electric and Gas Company
 Address Box 570 County Essex
 Municipality Newark State New Jersey Zip Code 07101
 Telephone (201) 430-7000
4. This is an application for New Jersey Pollutant Discharge Elimination System (Renewal) Permit
 (Name of permit, certification, approval or exemption. See Item 9. Next Page.)
5. Fee is attached (If applicable). \$ _____
 (Provide explanation of how fee was calculated. Read Requirements Section of Standard Application booklet.)
6. Estimated construction cost of project:
 - a. \$ _____ total cost of the project.
 - b. \$ _____ portion for which this permit is requested.
7. I have included certifications of any public notifications. Yes _____ No _____
8. If applicable:
 (For Waterfront Development applications, &c. must be completed.)
 - a. Source of Water Supply Delaware River and On-Site Wells
 - b. For Treatment at (Water Treatment Plant) N/A
 - c. Stream, Waterway, Pond or Lake Delaware River
 - d. Wastewater Treatment Facility N/A

* Applicant/Owner must be the individual or municipality, public agency, utility, company, industry who will be the eventual owner and operator of said facility (sewer extension or treatment works) when completed.

9. Have any other applications for this site/project been submitted, or have any state permits been issued for this project? (If yes, indicate status and project number below.)

No YesX..... Decision

PERMIT TYPE	(Use additional sheets if necessary.)	APPLICATION STATUS	PROJECT #
		(PENDING - APPROVED)	
9.1	CAFRA.....	<u>Approved</u>	CA74-014
9.2	Waterfront Development (Riparian).....	<u>Approved</u>	74-46
9.3	Wetlands	<u>Approved</u>	W74-042
9.4	Purchase Water	_____	_____
	Diversion:		
9.5	Divert Water Supply for Public Use.....	_____	_____
9.6	Divert Surface Waters for Private Use	_____	_____
9.7	Divert Subsurface/Percolating Water for Private Use.....	<u>Approved</u>	P-998
9.8	Well Drilling	_____	_____
	Water Lowering:		
9.9	Permanent Lowering.....	_____	_____
9.10	Temporary Lowering.....	_____	_____
9.11	Construct/Modify, Operate Public Potable Water Works.....	_____	_____
9.12	Connection between an approved water supply and non-approved supply	_____	_____
9.13	Water Quality Certification.....	<u>Approved</u>	NJDEP letter 5/1/74
9.14	Construct/Repair Dam	_____	_____
9.15	Stream Encroachment.....	<u>Waiver Received</u>	_____
9.16	Sewer Systems: Collectors, Pump Station, etc.....	<u>See Attachment</u>	_____
9.17	Exemption from Sewer Ban	_____	_____
9.18	New Jersey Pollutant Discharge Elimination System (Specify).....	<u>Approved</u>	NJ0025411
9.19	Solid Waste Permits (Specify).....	<u>See Attachment</u>	_____
9.20	Air Quality Permits (Specify).....	<u>See Attachment</u>	_____
9.21	Delaware and Raritan Canal Review Zone "Certificate of Approval"	<u>See Attachment</u>	_____
9.22	Other State agencies' permits	<u>See Attachment</u>	_____
9.23	Local Permits	<u>See Attachment</u>	_____
9.24	Federal Permits.....	<u>See Attachment</u>	_____

10. Brief Description of the Proposed Project and Intended Use:

Facility discharges include: A) Cold-side Cooling Tower Blow-down: Prevents solids build-up in condenser cooling water. B) Sewage Treatment Plant: Treats sanitary wastes. C) Low Volume Waste System: Treats boiler blow-down and potentially oily wastes. D) Liquid Radioactive Waste System: Removes radioactive isotopes from certain liquid waste streams. E) Sedimentation Pond: Treats metal cleaning wastes during plant start-up (flushing) operations.

11. I hereby certify that the information furnished on this application (and the attachments) is true. I am aware that false swearing is a crime in this State and subject to prosecution.

T. J. Martin
Type: Name and Date

Vice President - Engineering and Construction
Type: Position

T. J. Martin
Signature of Applicant

5-10-84
Date

APPLICATIONS/PERMITS FOR THE HOPE CREEK GENERATING STATION PROJECT

<u>PERMIT TYPE</u>	<u>APPLICATION STATUS</u>	<u>PERMIT #</u>
- NJPDES, Discharge to Groundwater for Settling Pond	Approved	NJ0025411
- NJPDES, Discharge to Surface Water for Settling Pond	Draft Received	NJ0025411
- Treatment Works Approval, Stage 2, for Low Volume System	Waiver Received	_____
- Treatment Works Approval, Stage 2, for Cooling Tower	Waiver Received	_____
- NJPDES, Temporary Discharge of Auxiliary Boiler Blowdown to the Delaware River	Approved	NJ0025411
- Operate Sewer Extension	Approved	SO-76-0193-4
- RCRA, Hazardous Waste Facility Registration	Granted	EPA I.D. - 135001474 N.J.I.D. - NJD980646939
- Construct/Operate Sewage Treatment Plants	Approved	SO-5-76-5720A SO-5-76-5720B
- Instruction/Operation Air Pollution Control Device For:		
Dust Coll. Cement	Approved	23728
Dust Coll. Cement	Approved	23729
Dust Coll. Cement	Approved	23730
Dust Coll. Cement	Approved	23731
Peabody Boilers	Approved	34090
Space Heater 2MBTU	Approved	35717
Space Heater 2MBTU	Approved	35718
Space Heater 2MBTU	Approved	35719
Space Heater 2MBTU	Approved	35720
Space Heater 2MBTU	Approved	35721
Space Heater 2MBTU	Approved	35722
Space Heater 2MBTU	Approved	35723
Space Heater 2MBTU	Approved	35724
Space Heater 2MBTU	Approved	35725
Space Heater 2MBTU	Approved	35726

<u>PERMIT TYPE</u>	<u>APPLICATION STATUS</u>	<u>PERMIT #</u>
Space Heater 2MBTU	Approved	35727
Space Heater 2MBTU	Approved	35728
Space Heater 2MBTU	Approved	35729
Space Heater 2MBTU	Approved	35730
Space Heater 2MBTU	Approved	35731
Cooling Tower	Approved	41932
Tank OOT-527 - Day Tank	Approved	42152
#2 Fuel Oil Tank (AT-403)	Approved	42154
#2 Fuel Oil Tank (BT-403)	Approved	42155
#2 Fuel Oil Tank (CT-403)	Approved	42156
#2 Fuel Oil Tank (ET-403)	Approved	42157
#2 Fuel Oil Tank (FT-403)	Approved	42158
#2 Fuel Oil Tank (GT-403)	Approved	42159
#2 Fuel Oil Tank (HT-403)	Approved	42160
#2 Fuel Oil Tank (IT-403)	Approved	42161
Diesel Gen. #1	Approved	42170
Diesel Gen. #2	Approved	42171
Diesel Gen. #3	Approved	42172
Diesel Gen. #4	Approved	42173
Boiler #1	Approved	42178
Boiler #2	Approved	42179
Boiler #3	Approved	42180
#2 Fuel Oil Tank OOT-516	Approved	42181
Na O Cl Stor. Tank (OBT-501)	Approved	42215
Na O Cl Stor. Tank (OCT-501)	Approved	42216
H2SO4 Stor. Tank OAT-500	Approved	42218
Na O Cl Stor. Tank (OET-501)	Approved	42220
Na O Cl Stor. Tank (OFT-501)	Approved	42221
Spac Htr. CF-100-1	Approved	45630
Spac Htr. CF-100-2	Approved	45631
Spac Htr. CF-100-3	Approved	45632
Spac Htr. CF-100-4	Approved	45633
Spac Htr. CF-100-5	Approved	45634
Spac Htr. CF-200-1	Approved	45635
Spac Htr. CF-200-2	Approved	45636
Spac Htr. CF-200-3	Approved	45637
Spac Htr. CF-250	Approved	45638
Propane Tank #1	Approved	45639 (36180)
Propane Tank #2	Approved	45640 (36181)
Propane Tank #3	Approved	45641 (36182)
Propane Tank #4	Approved	45642 (36183)

<u>PERMIT TYPE</u>	<u>APPLICATION STATUS</u>	<u>PERMIT #</u>
Leaded Gas Tanks	Approved	62426
Unleaded Gas Tanks	Approved	62204
Space Htr.CF-100-6	Approved	62206
Space Htr.CF-100-7	Approved	62205
Space Htr.CF-125-1	Approved	62207
Space Htr.CF-125-2	Approved	62208
Space Htr.CF-127-1	Approved	62209
Fly Ash Storage Tanks	Approved	63438
20,000 Fuel Tank	Approved	63787
3,000 Gasoline Tank	Approved	63439
4,000 Fuel Tank	Approved	63700
Cement Storage Tank	Approved	65460
Lube Oil Stor. Tank (OT-119)	Approved	66250
Lube Oil Rec. Tank (OT-120)	Approved	66251
Paint and Blasting Shop	Approved	67426
 <u>FEDERAL PERMITS</u>		
NRC, Construction Permit	Approved	Docket No. 50-354
NRC, Operating License	Applied for	-
, Project Review	Approved	Docket No. D-73-193CP
U.S. Army Corps of Engineers, Dredging Permit	Approved	NAPOP-R-970
FAA, Air Navigation Determination	Approved	74-EA-995-0E
 <u>LOCAL PERMITS</u>		
Building Permit	Approved	No. 152

EN:dh

4/11/84

94 62/02 3-dh

SOME PERMIT APPLICATIONS REQUIRE SPECIFIC ENDORSEMENTS OF OWNERS, AGENTS, MUNICIPALITIES, ETC. ENDORSEMENTS MAY BE REQUIRED FOR YOUR PERMIT.

VERIFY THE NEED FOR ENDORSEMENTS IN THE "REQUIREMENTS" SECTION OF THE STANDARD APPLICATION FORM CP #1 BOOKLET OR WITH THE APPROPRIATE DEP AGENCY.

A. PROPERTY OWNER'S CERTIFICATION*†

I hereby certify that Public Service Electric and Gas Company
Property Owner's Name

is the owner of the property upon which the proposed work is to be done. This endorsement is certification that the owner grants permission for the conduct of the proposed activity.

In addition, the aforementioned property owner shall certify:

- 1. Whether any work is to be done within an easement — Yes _____ (initial) No *WJ* (initial)
- 2. Whether any part of the entire project (i.e., pipeline, roadway, cable, transmission line, etc.) will be located within property belonging to the State of New Jersey. Yes *WJ* (initial) No _____ (initial)

Type or Print Name and Address of Owner, if different from Item 1 on Page 1

Date

R. B. Fitzsimmons
Signature of Owner
General Manager - Real Estate

* Not required for Sewer System Application.
† Required for the Land Application of Sludge, Septage or Compost.

B. APPLICANT'S AGENT

I, the applicant (name) N/A
authorize to act as my agent/representative in all matters pertaining to my application the following person:

Name _____ Phone _____
 Address _____ County _____
 City or Town _____ State _____ Zip Code _____
 Occupation/Profession _____

Signature of Applicant

AGENT'S CERTIFICATION

Sworn before me
this _____ day of
_____ 19 _____

I agree to serve as agent for the above-named applicant

Notary Public

Signature of Agent

C. PROPER CONSTRUCTION AND OPERATION CLAUSE (Sewer Extensions, Treatment Works Approval, Water Work)

I, the applicant, agree that the works will be properly constructed and operated in accordance with the engineering plans and specifications, as approved, and the conditions under which approval is granted by the State Department of Environmental Protection.

Signature of Applicant N/A

D. STATEMENT OF PREPARER OF PLANS, SPECIFICATIONS AND ENGINEER'S REPORT

I hereby certify that the engineering plans, specifications and engineer's report applicable to this project comply with the current rules and regulations of the State Department of Environmental Protection with the exceptions as noted.

Signature of Engineer N/A

Type: Name and Date

PROFESSIONAL ENGINEER'S
EMBOSSSED SEAL

Position, Name of Firm

E. OWNER'S COMPLIANCE WARRANT (NJPDES ONLY)

I, the owner, hereby agree that any treatment works constructed to meet the NPDES/NJPDES permit discharge limits will be properly constructed and operated to meet those limits. I also warrant that the discharge(s) will meet the effluent limitations as described in the NPDES/NJPDES permit, as issued.

Signature of Owner

Title

Date

SCALE



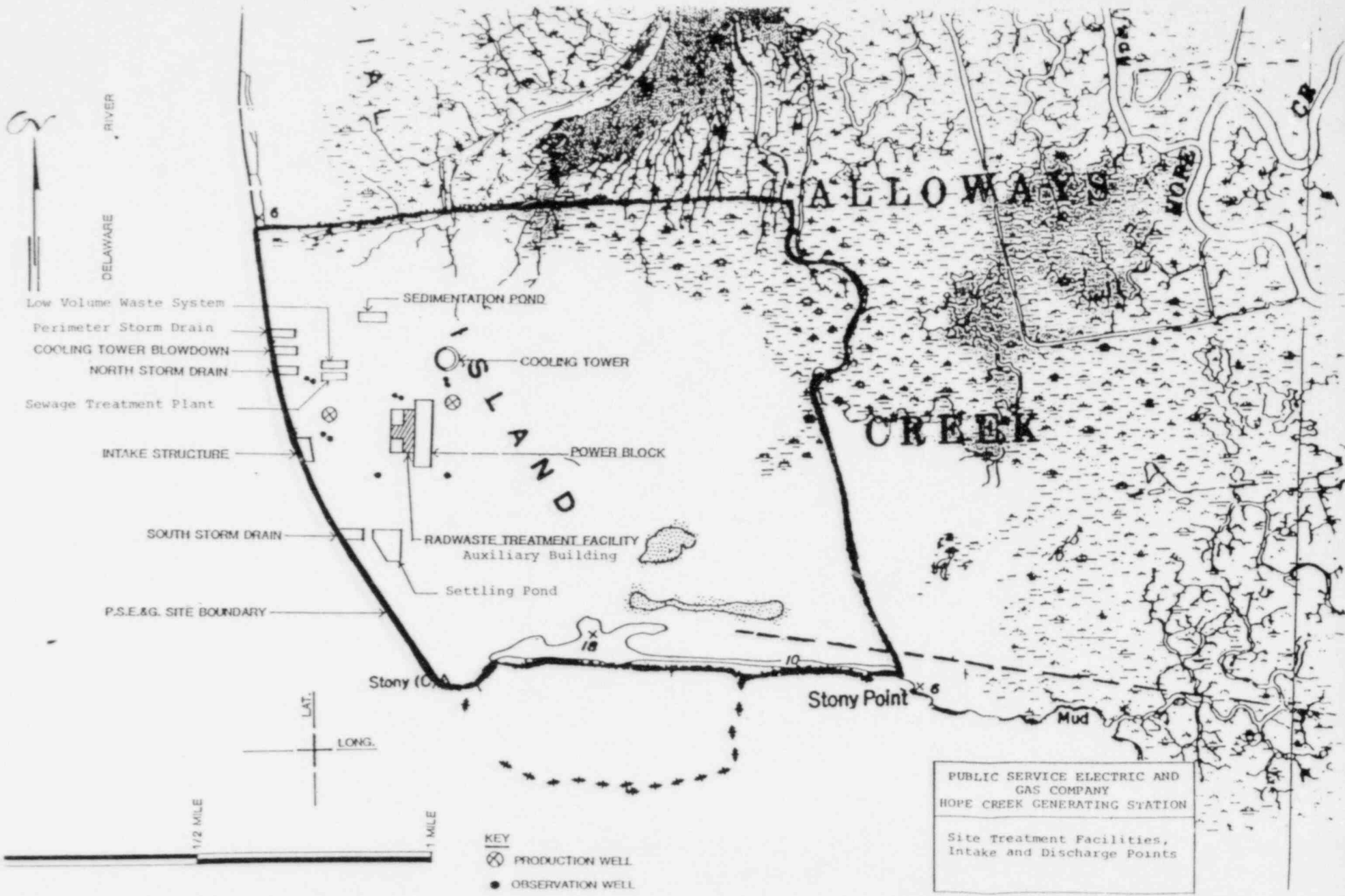
CONTOUR INTERVAL 10 FEET

U. S. GEOLOGICAL SURVEY

PUBLIC SERVICE ELECTRIC AND
GAS COMPANY
HOPE CREEK GENERATING STATION

SITE VICINITY
WITHIN 8 KILOMETERS (5 MI.)





Low Volume Waste System
 Perimeter Storm Drain
 COOLING TOWER BLOWDOWN
 NORTH STORM DRAIN
 Sewage Treatment Plant

INTAKE STRUCTURE

SOUTH STORM DRAIN

P.S.E.&G. SITE BOUNDARY

SEDIMENTATION POND

COOLING TOWER

POWER BLOCK

RADWASTE TREATMENT FACILITY
 Auxiliary Building

Settling Pond

Stony (C)

Stony Point

Mud

PUBLIC SERVICE ELECTRIC AND
 GAS COMPANY
 HOPE CREEK GENERATING STATION

Site Treatment Facilities,
 Intake and Discharge Points

KEY
 ⊗ PRODUCTION WELL
 ● OBSERVATION WELL



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM
SUPPLEMENT TO THE STANDARD APPLICATION FORM CP # 1



APPLICATION TO DISCHARGE WASTEWATERS AND
RESIDUALS TO THE STATE'S LAND AND WATER

Answer all questions. Please print or type.

1. Circle the letter(s) for those discharge activities presently conducted or to be conducted as part of the facility's operation. (Seasonal facility operation shall be considered as a present operation.)
- In the space provided, indicate if there is an existing NPDES or NJPDES permit for each circled activity (yes/no).
 - In the space provided, indicate if this application is for a "new" source, an "existing" source, or a "renewal" of a current permit.

<u>DISCHARGE ACTIVITY</u>	<u>YES/NO</u>	<u>NEW, EXISTING, RENEWAL</u>
A. Municipal Surface Water Discharge	_____	_____
B. Industrial/Commercial Surface Water Discharge	Yes _____	Renewal _____
C. Thermal Surface Water Discharge	Yes _____	Renewal _____
D. Land Application of Sludge and Septage	_____	_____
E. Land Application of Industrial Waste Residues	_____	_____
F. Landfill Wastes	_____	_____
G. Spray Irrigation	_____	_____
H. Overland Flow	_____	_____
I. Rapid Infiltration	_____	_____
J. Surface Impoundment	Yes (temporary) _____	Existing _____
K. Underground Injection	_____	_____
L. Discharge to a Domestic Treatment Works	_____	_____

2. Facility: Latitude 39° 27' 53" N Longitude 75° 32' 12" W

3. Name and address of applicant's parent corporation, subsidiary, or partnership data.
(Attach additional sheets if necessary.)

Name Public Service Electric and Gas Company Telephone No. (201) 430-7000
 Mailing Address Box 570
 City or Town Newark State New Jersey Zip Code 07101

4. Facility's Contact Person (This person must be responsible for and familiar with the facility operation.)

Name D. E. Cooley Telephone No. (201) 430-8413
 Address of Operator T22A Box 570
 City or Town Newark State New Jersey Zip Code 07101

5. Is the facility a
- Federal Facility
 - State Facility
 - Public Facility (a local government subdivision)
 - Private Facility

6. List in order of priority all Standard Industrial Codes (SIC) which best reflect the principal products or services provided by the facility.

<u>SIC</u>	<u>PRODUCTS OR SERVICES PROVIDED</u>
Group No. 491/Industry No. 4911	<u>Generation, Transmission and Distribution of Electricity</u>
_____	_____
_____	_____
_____	_____

7. If applicable, identify all administrative orders, temporary or permanent injunctions, civil administrative penalties, civil penalties, or criminal actions concerning pollution issued against the facility during the last five (5) years.

<u>ENFORCEMENT ACTION</u>	<u>DATE OF ACTION</u>	<u>RESULT</u>
<u>Administrative Order;</u>	<u>8/10/83</u>	<u>Prepared and Submitted</u>
<u>NJDEP Division of Waste</u>	_____	<u>Required Documents</u>
<u>Management.</u>	_____	_____
_____	_____	_____

8. If applicable, list all locations involved in the storage of solid or liquid waste at the facility for which the NJPDES application is being made and the ultimate disposal sites of solid or liquid wastes generated by the facility being permitted.

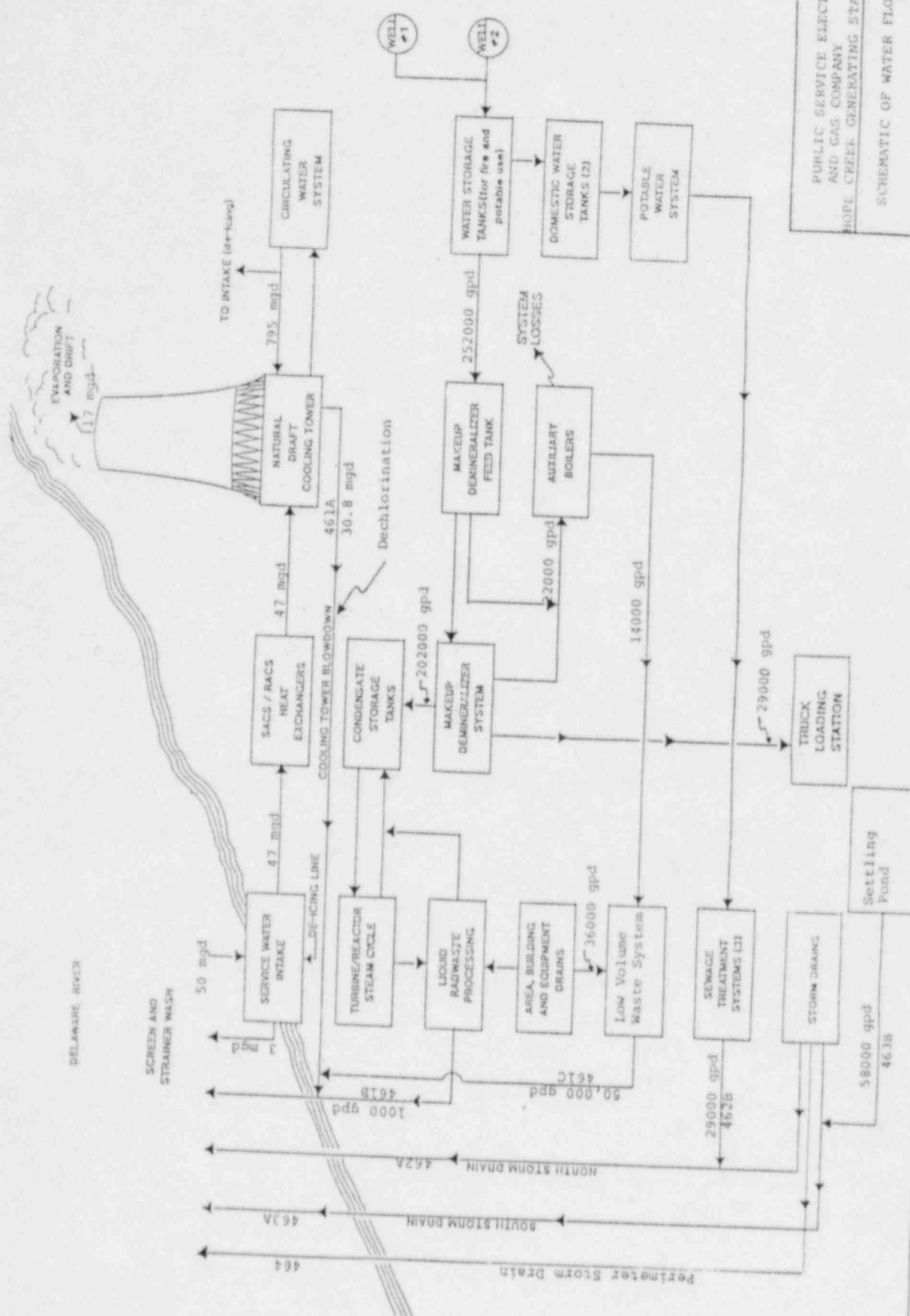
<u>STORAGE SITE(S)</u>	<u>ULTIMATE DISPOSAL SITE(S)</u>
<u>See attachment</u>	_____
_____	_____
_____	_____
_____	_____

LOCATIONS AT HOPE CREEK GENERATING STATION
USED FOR STORAGE OF SOLID OR LIQUID WASTES
AND ULTIMATE DISPOSAL OF EACH

<u>WASTE TYPE</u>	<u>WASTE SOURCE</u>	<u>ULTIMATE DISPOSAL</u>
Sludge	Sewage Treatment Plant	Trucked off-site
Liquid	Sewage Treatment Plant	Discharged to Delaware River through the North Storm Drain.
Liquid	Demineralizer Regenerant Waste Storage Tank	Trucked to the Salem Generating Station for treatment
Liquid	Oily Water, Low Volume Waste Water Treatment System	Discharged to Delaware River
Sludge	Oily Water, Low Volume Waste Water Treatment System	Trucked off-site
Liquid	Settling pond for metal cleaning wastes (primarily for system start-up)	Discharged to Delaware River
Sludge	Settling Pond	Trucked off-site
Liquid	Waste Oil Holding Tank	Trucked off-site
Liquid	Liquid Radioactive Waste System	Recycled, concentrated for off-site disposal or treated and discharged to Delaware River in accordance with discharge limits in 10CFR20.
Solid	Spent Nuclear Fuel	Stored on-site in spent fuel pool
Solid	Low Level Solid Radioactive Waste System	Shipped off-site to licensed burial site
Sludge	Cooling Tower Basin (bottom sediment)	Deposited in on-site disposal site

EN:db

MP83 123/21 1



PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HOPE CREEK GENERATING STATION
SCHEMATIC OF WATER FLOW

FORM
2C
NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY
APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

OUTFALL NUMBER (list)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG	2. MIN	3. SEC.	1. DEG.	2. MIN	3. SEC.	
461A	39	28	15	75	32	30	Delaware River
461B	39	28	15	75	32	30	Delaware River
461C	39	28	15	75	32	30	Delaware River
462A	39	28	15	75	32	30	Delaware River
462B	39	23	15	75	32	30	Delaware River
463A	39	28	00	75	32	30	Delaware River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO (list)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT		
	A. OPERATION (list)	D. AVERAGE FLOW (include units)	B. DESCRIPTION	C. LIST CODES FROM TABLE 2C-1	
461A	Cooling Tower Blowdown	30.8 mgd	See Attachment	2F	2E
	(Retention time in cooling water system averages 5.4 hours)			1F	4A
				5Q	
461B	Liquid Radioactive Waste System	1,000 gpd	See Attachment	2J	1C
	(Batch operation)			4A	4C
				1F	2K
461C	Low Volume Waste System	50,000 gpd	See Attachment	1H	4A
	(Retention time in the system is approximately one hour)			1U	
462A	Storm Drain, North	201,000 gpd	See Attachment	4A	
	(Intermittent flows)				
462B	Sewage Treatment System	29,000 gpd	See Attachment	3A	4A
	(Retention time in the system is approximately 30 hours)			2F	1T
				1L	5A
463A	Storm Drain, South	189,000 gpd	See Attachment	4A	
	(Intermittent flows)				

OFFICIAL USE ONLY (effluent guidelines sub-categories)

FORM
 2C
 NPDES



U.S. ENVIRONMENTAL PROTECTION AGENCY
 APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER
 EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICULTURAL OPERATIONS
 Consolidated Permits Program

I. OUTFALL LOCATION

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

OUTFALL NUMBER (lat)	B. LATITUDE			C. LONGITUDE			D. RECEIVING WATER (name)
	1. DEG.	2. MIN.	3. SEC.	1. DEG.	2. MIN.	3. SEC.	
463B	39	28	00	75	32	30	Delaware River

II. FLOWS, SOURCES OF POLLUTION, AND TREATMENT TECHNOLOGIES

A. Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in Item B. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined (e.g., for certain mining activities), provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.

B. For each outfall, provide a description of: (1) All operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and storm water runoff; (2) The average flow contributed by each operation; and (3) The treatment received by the wastewater. Continue on additional sheets if necessary.

1. OUTFALL NO (lat)	2. OPERATION(S) CONTRIBUTING FLOW		3. TREATMENT	
	a. OPERATION (lat)	b. AVERAGE FLOW (include units)	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
463B	Settling Pond (Detention time in the pond is approximately 21 days)	58,000 gpd	See Attachment	1U 4A
	Storm Drain Perimeter (Intermittant Flow)	248,000 gpd	See Attachment	4A
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II.) Flows, Sources of Pollution, and Treatment Technologies
Attachment

OUTFALL NUMBER/TREATMENT DESCRIPTION

<u>OUTFALL NO.</u>	<u>OPERATION</u>	<u>TREATMENT</u>
461A	Cooling Tower Blowdown	<p>a.) Cooling Tower Blowdown is Delaware River Water concentrated approximately two (2) times. Condenser cooling water is treated to remove heat by circulation through an evaporative natural draft (counter flow) cooling tower. Sulfuric Acid is added to control scaling. Sodium hypochlorite is added for biofouling prevention. A portion of this water is continuously removed to prevent solids buildup as required, it is treated with a Sulfur IV type dechlorinating agent to reduce chlorine residuals to acceptable levels.</p> <p>b.) Cooling tower basin sediment will be removed from time to time and trucked to an onsite dredge spoil disposal area.</p>
461B	Liquid Radioactive Waste System	<p>a.) The Liquid Radioactive Waste System collects and processes water arising from various radioactive processes within the plant. These liquid wastes are treated in order to recycle water with specific conductance less than or equal to 0.1 umho per centimeter. High purity treated effluents in excess of plant need are discharged to the Delaware River.</p> <p>b.) Contaminated residues and deionizing resins created in the treatment of liquid radioactive wastes are solidified for off-site shipment and disposal in a Federally licensed facility.</p>

<u>OUTFALL NO.</u>	<u>OPERATION</u>	<u>TREATMENT</u>
461C	Low-Volume Waste Treatment System	<p>a.) The low-volume waste treatment system collects potentially oily water from area, building and equipment drains throughout the site. Most flows to the system are intermittent except for auxiliary boiler blowdown and blowdown quench water, which also are treated in the low volume waste treatment facility. These liquid wastes may have floatable and oily constituents, which are removed in an API-type oil separator. After treatment, clarified water discharges to the Delaware River through DSN 461A.</p> <p>b.) Oily sludges isolated from the oil-water separator are stored in a holding tank and trucked off-site to a licensed disposal facility</p>
462A	Storm Drain, North	<p>a.) The north storm drain accepts area run-off and site drainage from the facility parking lot, auxiliary boiler area, building roof drains, catch basins, etc. These waters discharge directly to the Delaware River.</p> <p>b.) No sludges are generated by this system.</p>
462B	Sewage Treatment System	<p>a.) The Sewage Treatment System at Hope Creek collects and treats sanitary wastes in 3 package (extended aeration-activated sludge type) plants. Sewage plant effluent discharges to the Delaware River through DSN 462A.</p> <p>b.) Sludges generated in the Sewage Treatment System are trucked off-site to a licensed disposal facility</p>
463A	Storm Drain, South	<p>a.) The south storm drain accepts area run-off and site drainage from the facility switch yard, guardhouse, service water intake structure, roof drains, catch basins, etc. These waters discharge directly to the Delaware River.</p>

OUTFALL NO.

OPERATION

TREATMENT

463B

Settling Pond

b.) No sludges are generated by this system.

a.) The Settling Pond accepts non-chemical metal cleaning wastes and removes solids through gravity settling. Settling Pond effluent discharges to the Delaware River through DSN 463A.

b.) Settled solids, grit, etc. are trucked to a licensed landfill.

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Perimeter Storm Drain

a.) The perimeter storm drain accepts storm water run-off and site drainage from the cooling tower area, parking facilities, and areas external to the project. These waters discharge to the Delaware River.

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in items II-A or B intermittent or seasonal?

YES (complete the following table) NO (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(s) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		c. DURATION (in days)
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
463B	Settling Pond	Ranges from 1-7 days per week	N/A System not yet in operation	N/A	.058	NA	58,000 gpd	N/A
461B	Liquid Radioactive Waste System	7 (projected)	12 (projected)	N/A System not in operation	0.289	1,000 gpd	11,000 gpd	N/A

III. MAXIMUM PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?

YES (complete Item III-B) NO (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?

YES (complete Item III-C) NO (go to Section IV)

C. If you answered "Yes" to Item III-B, list the quantity which represents an actual measurement of your maximum level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. MAXIMUM QUANTITY			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	

IV. IMPROVEMENTS

A. Are you now required by any Federal, State or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

YES (complete the following table) NO (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. NO.	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction. MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAMS IS ATTACHED

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding - Complete one set of tables for each outfall - Annotate the outfall number in the space provided.
 NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
Asbestos (DSN No.461A)	Asbestos is a constituent of cooling tower fill, distribution piping and drift eliminators. (No operating data are available).		
Hydrazine (DSN No.462A)	Hydrazine will be used as an oxygen scavenger in the auxiliary boiler to reduce corrosion.		

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

A. Is any pollutant listed in Item V-C a substance or a component of a substance which you do or expect that you will over the next 5 years use or manufacture as an intermediate or final product or byproduct?

YES (list all such pollutants below)

NO (go to item VI-B)

B. Are your operations such that your raw materials, processes, or products can reasonably be expected to vary so that your discharges of pollutants may during the next 5 years exceed two times the maximum values reported in Item V?

YES (complete Item VI-C below)

NO (go to Section VIII)

C. If you answered "Yes" to Item VI-B, explain below and describe in detail the sources and expected levels of such pollutants which you anticipate will be discharged from each outfall over the next 5 years, to the best of your ability at this time. Continue on additional sheets if you need more space.

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges into a receiving water in relation to your discharge within the last 3 years?

YES (Identify the tests and brief the results on pages below)

NO (Go to Section VIII)

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (List the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (Go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (if any)
Quality Control Laboratory	243 White Horse Pike Audobon, N.J. 08106	(609) 428-1303	For sewage plant BOD, TSS, COD, TOC, Ammonia, Color, Fecal Coliform, Nitrate, TON, Oil and Grease, Phosporus, Sulfate, Sulfide, Surfactants, Iron, Magnesium, Manganese, Copper
John G. Reutter Assoc.	Ninth and Cooper Streets, Camden, N.J. 08101	(609) 541-7700	All "intake" values for every discharge except No. 461A

IX. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME AND OFFICIAL TITLE (Type or print)	B. PHONE NO. (Area code & no.)
C. SIGNATURE Thomas J. Martin, Vice President Engineering and Construction	D. DATE SIGNED (201) 430-8316

VIII.) CONTRACT ANALYSIS INFORMATION (continued)

A. <u>NAME</u>	B. <u>ADDRESS</u>	C. <u>TELEPHONE</u>	D. <u>POLLUTANTS ANALYZED</u>
PSE&G Energy Laboratory	200 Boyden Ave. Maplewood, N.J. 07040	(201) 621-7500	"Intake" values for DSN 461A

KEY TO HOPE CREEK GENERATING STATION
NJPDES RENEWAL NOMENCLATURE

- *-1 Value based on engineering estimate; process not yet in operation.
- *-2 No value available; process not yet in operation, but pollutant is expected to be present.
- *-2A No value available; process not yet in operation, but pollutant is expected to be absent.
- *-3 Process not yet in operation. Pollutant will be present in intake water, creating the basis for a "net limitation".
- *-4 Water quality is expected to be typical of storm water runoff.
- *-5 Flows are based on approximate drainage area and (maximum and average) daily rainfall (from U.S. Department of Commerce - 1968).
- *-6 Daily Maximum Concentration value based on one sample.
- X (When placed under the "intake" column)
Pollutant expected to be present in the discharge, due solely to its presence in intake water.
- NA Data not available.

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)

NJ0025411

Cooling Tower
Blowdown
(non-process)
Form Approved OMB No. 158-R0173

OUTFALL NO

461A

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			b. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	See attached note		NA	NA	NA	NA	*-3	mg/L	Kg	See attached note		
b. Chemical Oxygen Demand (COD)	See attached note		NA	NA	NA	NA	*-3	mg/L	Kg	See attached note		
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	See attached note		NA	NA	NA	NA	*-3	mg/L	Kg	See attached note		
e. Ammonia (as N)	See attached note		NA	NA	NA	NA	*-3	mg/L	Kg	See attached note		
f. Flow	VALUE 54,440		VALUE 54,440		VALUE 21,360		*-1	gpm	gpm	VALUE 32,860		*-1
g. Temperature (winter)	VALUE 28.5		VALUE NA		VALUE 17.3		*-1	°C		VALUE 2.9		24/day
h. Temperature (summer)	VALUE 34.5		VALUE NA		VALUE 28.8		*-1	°C		VALUE 25.8		24/day
i. pH	MINIMUM 6.5	MAXIMUM 8.5	MINIMUM NA	MAXIMUM NA	X		*-1	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	X											X		
b. Chlorine, Total Residual	X		0.5	4.1	NA	NA	NA	NA	*-1	mg/L	Kg	NA	NA	NA
c. Color	X											X		
d. Fecal Coliform	X											X		
e. Fluoride (16984-48-8)	X											X		
f. Nitrate-Nitrite (as N)	X											X		

ITEM V-B CONTINUED FROM FRONT

3. EFFLUENT

POLLUTANT AND CAS NO. (if available)	2. M S. M PERCENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM VALUE		I. NO. OF ANALYSES	4. UNITS		5. INTAKE (option-1)		NO. OF ANALYSES
		(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS		(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	
Nitrogen, total Organic (M, N)	X											X	
Oil and Grease	X											X	
Phosphorus P, Total (7723-14-0)	X											X	
Radioactivity													
1) Alpha, total		X											
2) Beta, total		X											
3) Radium, total		X											
4) Radium 226, Total		X											
5) Sulfate (as SO ₄) (14208-79-8)	X		See attached note	NA	NA	NA	NA	*-3	mg/L	Kg		See attached note	
6) Sulfide (as S)		X											
7) Sulfite (as SO ₃) (14286-48-3)		X											
8) Surfactants		X											
9) Aluminum, Total (7429-90-8)		X											
10) Barium, Total (7440-39-3)		X											
11) Boron, Total (7440-42-8)		X											
12) Cobalt, Total (7440-48-4)		X											
13) Iron, Total (7439-89-8)	X		See attached note	NA	NA	NA	NA	*-3	mg/L	Kg		See attached note	
14) Magnesium, Total (7439-95-4)	X												
15) Molybdenum, Total (7439-98-7)		X											
16) Manganese, Total (7439-96-8)	X												
17) Tin, Total (7440-31-8)		X											
18) Titanium, Total (7440-32-8)		X											

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CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2o-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TEST FOR CHLORIDES	B. TEST FOR SULFIDES	C. TEST FOR AMMONIUM	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-38-0)			X												
2M. Arsenic, Total (7440-38-2)		X											X		
3M. Beryllium, Total (7440-41-7)			X												
4M. Cadmium, Total (7440-43-9)		X											X		
5M. Chromium, Total (7440-47-3)		X											X		
6M. Copper, Total (7550-50-8)		X		See attached note	NA	NA	NA	NA	*-3	mg/L	Kg	See attached note			
7M. Lead, Total (7439-92-1)		X											X		
8M. Mercury, Total (7439-97-6)		X											X		
9M. Nickel, Total (7440-02-0)		X											X		
10M. Selenium, Total (7782-49-2)		X											X		
11M. Silver, Total (7440-22-4)		X											X		
12M. Thallium, Total (7440-28-0)			X												
13M. Zinc, Total (7440-66-6)		X											X		
14M. Cyanide, Total (57-12-6)			X												
15M. Phenols, Total		X												X	
DIOXIN															
2,3,7,8 Tetra chlorodibenzo P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NUMBER (if available)	MARK 'X'		3. EFFLUENT		4. UNITS		5. IN. (optional)		6. P.O. OF ANAL. VSES	
	100 mg/L	1000 mg/L	(a) Concentration	(b) Mass	(a) Concentration	(b) Mass	(a) Concentration	(b) Mass		
GCMS FRACTION - VOLATILE COMPOUNDS										
1V. Acetone (107-29-6)			X							
2V. Acrylonitrile (107-13-1)			X							
3V. Benzene (71-43-2)			X							
4V. Bis (2-Chloroethyl) Ether (842-86-1)			X							
5V. Bromobenzene (76-25-2)			X							
6V. Carbon Tetrachloride (56-23-6)			X							
7V. Chloroform (108-90-7)			X							
8V. Chlorobromomethane (124-46-1)			X							
9V. Chloroethane (78-06-2)			X							
10V. 2-Chloroethyl Ethyl Ether (110-78-8)			X							
11V. Chloroform (67-68-3)			X							
12V. Dichlorobromomethane (78-27-4)			X							
13V. Dichlorodifluoromethane (78-31-8)			X							
14V. 1,1-Dichloroethane (78-34-3)			X							
15V. 1,2-Dichloroethane (107-06-2)			X							
16V. 1,1-Dichloroethene (78-36-6)			X							
17V. 1,2-Dichloroethene (78-87-6)			X							
18V. 1,3-Dichloroethane (842-78-6)			X							
19V. Ethylbenzene (100-41-4)			X							
20V. Methyl Bromide (74-83-8)			X							
21V. Methyl Chloride (74-87-3)			X							

CONTINUE ON PAGE V-8

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Form 3510-2C (Rev. 12-80)
Previous edition may be used.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. LONG TERM AVERAGE VALUE		6. NO. OF ANAL. YRS		7. LONG TERM AVERAGE VALUE		8. INI		9. LONG TERM AVERAGE VALUE		10. NO. OF ANAL. YRS	
	100-1000	1000-10000	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass	(i) concentration	(ii) mass
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)																		
22V. Methylene Chloride (78-09-3)			X															
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X															
24V. Tetrachloroethylene (127-18-4)			X															
25V. Toluene (108-88-3)			X															
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X															
27V. 1,1,1-Trichloroethane (71-55-6)			X															
28V. 1,1,2-Trichloroethane (79-00-5)			X															
29V. Trichloroethylene (79-01-6)			X															
30V. Trichlorofluoromethane (75-69-4)			X															
31V. Vinyl Chloride (75-01-4)			X															
GC/MS FRACTION - ACID COMPOUNDS																		
1A. 2-Chlorophenol (98-57-8)			X															
2A. 2,4-Dichlorophenol (120-83-2)			X															
3A. 2,4-Dimethylphenol (106-67-9)			X															
4A. 4,6-Dinitro-Cresol (534-52-1)			X															
5A. 2,4-Dinitrophenol (51-28-5)			X															
6A. 2-Nitrophenol (88-78-5)			X															
7A. 4-Nitrophenol (100-02-7)			X															
8A. P-Chloro-Cresol (59-80-7)			X															
9A. Pentachlorophenol (87-86-8)			X															
10A. Phenol (108-95-2)			X															
11A. 2,4,6-Trichlorophenol (88-06-2)			X															

EPA I.D. NUMBER (copy from Item 1 of Form 1) **NJ0025411** **OUTFALL NUMBER 461A**

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CONTINUED

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
	test results available	test results not available	8. MAXIMUM DAILY VALUE (if available) (1) concentration (2) mass	9. LONG TERM AVERAGE VALUE (if available) (1) concentration (2) mass	CONCENTRATION	U. MASS	LONG TERM AVERAGE VALUE (1) concentration (2) mass	NO. OF ANAL. YRS.
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)								
22B. 1,4-Dichlorobenzene (106-46-7)		X						
23B. 3,3'-Dichlorobenzidine (91-94-1)		X						
24B. Diethyl Phthalate (84-66-2)		X						
25B. Dimethyl Phthalate (131-11-3)		X						
26B. Di-N-Butyl Phthalate (84-74-2)		X						
27B. 2,4-Dinitrotoluene (121-14-2)		X						
28B. 2,6-Dinitrotoluene (806-20-2)		X						
29B. Di-N-Octyl Phthalate (117-84-0)		X						
30B. 1,2-Diphenylhydrazine (as Arzene) (122-06-7)		X						
31B. Fluoranthene (206-44-0)		X						
32B. Fluorene (86-73-7)		X						
33B. Hexachlorobenzene (118-71-1)		X						
34B. Hexachlorobutadiene (87-68-3)		X						
35B. Hexachlorocyclopentadiene (77-47-4)		X						
36B. Hexachloroethane (67-72-1)		X						
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)		X						
38B. Isophorone (78-59-1)		X						
39B. Naphthalene (91-20-3)		X						
40B. Nitrobenzene (98-95-3)		X						
41B. N-Nitrosodimethylamine (62-76-9)		X						
42B. N-Nitrosodi-N-Propylamine (62-164-7)		X						

CONTINUED FROM FRONT

MARK 'X' (if available)

1. POLLUTANT AND CAS NUMBER

2. MAXIMUM DAILY VALUE (if available)

3. EFFLUENT (if available)

GC/MS FRACTION -- BASE/NEUTRAL COMPOUNDS (continued)

GC/MS FRACTION -- PESTICIDES

1. POLLUTANT AND CAS NUMBER	2. MAXIMUM DAILY VALUE (if available)	3. EFFLUENT (if available)		4. UNITS		5. INT. AVERAGE VALUE (if available)		6. NO. OF ANAL. YSES
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	
43B. N-Nitro-sodiphenylamine (96-30-6)		X						
44B. Phenanthrene (98-01-6)		X						
46B. Pyrene (129-00-9)		X						
48B. 1,2,4-Trisubenzocyclopentadiene (120-83-1)		X						
17. Aldrin (309-00-3)								
29. D-BHC (319-84-6)								
35. β -BHC (1516-86-7)								
45. γ -BHC (96-63-9)								
49. δ -BHC (319-86-8)								
65. Chlordane (67-74-9)								
79. 4,4'-DDT (60-29-3)								
89. 4,4'-DDE (72-85-6)								
89. 4,4'-DDD (72-84-8)								
105. Dieldrin (60-87-1)								
119. D-Endosulfan (118-28-7)								
129. β -Endosulfan (118-29-7)								
139. Endosulfan Sulfate (1021-07-8)								
147. Etofen (72-30-8)								
189. Endrin Aldehyde (7431-83-4)								
189. Heptachlor (76-44-8)								

CONTINUE ON PAGE V-9

PAGE V-8

EPA I.D. NUMBER (copy from Item 1 of Form 1) **NJ0025411** | **461A** | **OUTFALL NUMBER**

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
	D. SE. W. QU. S.E.	C. SE. W. QU. S.E.	B. MAXIMUM DAILY VALUE (i) MASS CONCENTRATION	C. LONG TERM (if available) (i) MASS CONCENTRATION	A. CONCEN- TRATION	B. MASS	A. LONG TERM AVERAGE VALUE (i) CONCEN- TRATION	B. NO. OF ANAL- YSES
HCAMS FRACTION -- PESTICIDES (continued)								
17P, Heptachlor Epoxide 1024-87-3		X						
18P, PCB-1242 83489-21-0		X						
19P, PCB-1264 11097-88-1		X						
20P, PCB-1221 11104-28-2		X						
21P, PCB-1232 11141-18-5		X						
22P, PCB-1246 12672-28-6		X						
23P, PCB-1260 11066-82-6		X						
24P, PCB-1016 12674-11-2		X						
25P, Tetrachloro 8001-88-2		X						

BASES FOR NET LIMITATIONS FOR DSN 461A
(COOLING TOWER BLOWDOWN)

Non-contact cooling water for the Hope Creek Generating Station is taken from the Delaware River. It is drawn into the service water system and is subsequently used in the circulating water system. The only treatment this water receives is removal of excess heat through evaporative cooling in a counter-flow cooling tower. In this process, ambient pollutants can be concentrated to a maximum of approximately two times their original value. Cold side blowdown at this concentration is discharged directly to the Delaware River. The only chemical additions to the cooling water result from pH adjustment with sulfuric acid (as needed to prevent scaling) and chlorination (with sodium hypochlorite) and dechlorination (with sulfur dioxide).

The table below provides data on Delaware River water quality pollutants, their maximum values after concentration in the HCGS cooling tower and projected net contributions (maximums) arising from station operation.

AMBIENT AND STATION CONTRIBUTIONS TO
MAXIMUM DAILY POLLUTANT LEVELS IN COOLING
TOWER BLOWDOWN (CTB)

Pollutant	AMBIENT CONDITIONS Natural Pollutant in River Water Entering Cooling Tower		Natural Pollutant After Concentration in Cooling Tower ⁽³⁾		GROSS RELEASE Natural Pollutant + Station Concentration in CTB		NET RELEASE Station Contribution to CTB	
	mg/l ⁽¹⁾	Kg ⁽²⁾	mg/l	Kg	mg/l	Kg	mg/l	Kg
BOD	9.0	4,955	16.7	4,955	NA	NA	NA	NA
COD	353.3	193,940	653.6	193,940	NA	NA	NA	NA
TSS	222	121,950	411	121,950	511	151,620	100	29,670
Ammonia (as N)	1.67	757	2.55	757	NA	NA	NA	NA
Sulfate (as SO ₄)	898	492,852	1,661	492,852	1,937	498,849	276	5,997
Iron	5.8	3,175	10.7	3,175	11.7	3,472	1.0	297
Copper	0.13	72	0.24	72	0.44	131	0.2	59

NOTE: Delaware River Water is used as non-contact water at Hope Creek.
NA = Not Available

- 1 Maximum concentrations are based on 90th percentile values from Delaware River Water quality surveys (1968-1980).
- 2 All mass values are based on maximum flow (54,440 gpm) times maximum concentration.
- 3 Pollutants are concentrated a maximum of 1.85 times their original value in the Hope Creek Cooling Tower.

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

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
b. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
e. Ammonia (as N)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
f. Flow	VALUE 0.289		VALUE NA		VALUE 0.01		*-1	million gallons per day		VALUE NA		NA
g. Temperature (winter)	VALUE 26.7		VALUE NA		VALUE NA		*-1	°C		VALUE NA		NA
h. Temperature (summer)	VALUE 35.0		VALUE NA		VALUE NA		*-1	°C		VALUE NA		NA
i. pH	MINIMUM 6.0	MAXIMUM 9.0	MINIMUM NA	MAXIMUM NA	VALUE		*-1	STANDARD UNITS	VALUE			

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959 67 9)		X												
b. Chlorine, Total Residual		X												
c. Color	X		NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Fecal Coliform		X												
e. Fluoride (16084 48 6)		X												
f. Nitrate-Nitrite (as N)		X												

1. POLLUTANT AND CAS NO. (if available)	2. H.S. NO. (if available)	3. EFFLUENT	4. UNITS		5. INTAKE (optional)	
			8. CONCENTRATION	11. MASS	CONCENTRATION (1)	AVERAGE VALUE (2)
B. Nitrogen, Total Organic (as N)	X	D. MAXIMUM 30 DAY VALUE (if available)	(1) MASS CONCENTRATION	(2) MASS	10. NO. OF ANAL. YSES	11. MASS
B. Nitrogen, Total Organic (as N)	X					
B. Oil and Grease	X					
B. Phosphorus (as P), Total (7723-14-0)	X					
J. Radioactivity						
(1) Alpha, Total	X					
(2) Beta, Total	X	4.9 E-3 ml	NA	NA	*-1	NA
(3) Radium, Total	X					
(4) Radium 226, Total	X					
k. Sulfate (as SO4) (14808-79-8)	X					
l. Sulfide (as S)	X					
m. Sulfite (as SO3) (14285-46-3)	X					
n. Surfactants	X					
o. Aluminum, Total (7429-90-6)	X					
p. Barium, Total (7440-39-3)	X					
q. Barium, Total (7440-42-8)	X					
r. Cobalt, Total (7440-48-4)	X					
s. Iron, Total (7439-89-6)	X					
t. Magnesium, Total (7430-95-4)	X					
u. Molybdenum, Total (7430-98-7)	X					
v. Manganese, Total (7439-95-8)	X					
w. Tin, Total (7440-31-8)	X					
x. Titanium, Total (7440-32-8)	X					

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461B

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	A. 100% OF ALL POLLUTANTS	B. 10% OF ALL POLLUTANTS	C. 1% OF ALL POLLUTANTS	D. MAXIMUM DAILY VALUE		E. LONG TERM AVG. VALUE		F. NO. OF ANALYSES	G. CONCENTRATION	H. MASS	I. LONG TERM AVERAGE VALUE		J. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
METALS, CYANIDE, AND TOTAL PHENOLS														
1M. Antimony, Total (7440 36 0)	X													*-2A
2M. Arsenic, Total (7440 38 2)	X													*-2A
3M. Beryllium, Total (7440 41 7)	X													*-2A
4M. Cadmium, Total (7440 43 9)	X													*-2A
6M. Chromium, Total (7440 47 3)	X													*-2A
6M. Copper, Total (7550 50 8)	X													*-2A
7M. Lead, Total (7439 92 1)	X													*-2A
8M. Mercury, Total (7439 97 6)	X													*-2A
9M. Nickel, Total (7440 02 0)	X													*-2A
10M. Selenium, Total (7782 49 2)	X													*-2A
11M. Silver, Total (7440 22 4)	X													*-2A
12M. Thallium, Total (7440 28 0)	X													*-2A
13M. Zinc, Total (7440 66 6)	X													*-2A
14M. Cyanide, Total (57 12 5)	X													*-2A
15M. Phenols, Total	X													*-2A
DIOXIN														
2 3 7 8 Tetra chlorodibenzo P Dioxin (1764 01 6)				DESCRIBE RESULTS										

CONTINUE ON REVERSE

CONTINUED FROM

RONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'A'			3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	A. 11 IN- QUIR SM	L. 02 TO PUL SENT	C. 02 TO PUL SENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		E. LONG TERM AVG. VALUE (if available)		F. NO OF ANALYSES	G. CONCENTRATION	H. MASS	I. LONG TERM AVERAGE VALUE		J. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
VCMs FRACTION - VOLATILE COMPOUNDS															
V. Acrolein (107-02-8)	X									*-2A					
V. Acrylonitrile (107-13-1)	X									*-2A					
V. Benzene (71-43-2)	X									*-2A					
V. Bis (Chloroethyl) Ether (42-88-1)	X									*-2A					
V. Bromoform (5-25-2)	X									*-2A					
V. Carbon tetrachloride (5-23-5)	X									*-2A					
V. Chlorobenzene (108-90-7)	X									*-2A					
V. Chlorodifluoromethane (24-48-1)	X									*-2A					
V. Chloroethane (5-00-3)	X									*-2A					
V. 2 Chloroethyl Vinyl Ether (10-75-8)	X									*-2A					
V. Chloroform (7-68-3)	X									*-2A					
V. Dichlorodifluoromethane (5-27-4)	X									*-2A					
V. Dichlorodifluoromethane (5-71-8)	X									*-2A					
V. 1,1 Dichloroethane (75-34-3)	X									*-2A					
V. 1,2 Dichloroethane (107-06-2)	X									*-2A					
V. 1,1 Dichloroethylene (75-35-4)	X									*-2A					
V. 1,2 Dichloroethane (78-87-5)	X									*-2A					
V. 1,3 Dichloropropylene (42-76-6)	X									*-2A					
V. Ethylbenzene (100-41-4)	X									*-2A					
V. Methyl amide (74-83-9)	X									*-2A					
V. Methyl chloride (74-87-3)	X									*-2A					

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT					4. UNITS		5. INTAKE (optional)				
	A. ANAL. DATE	B. ANAL. TIME	C. ANAL. BY	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE		H. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X														*-2A
23V. 1,1,2,2-Tetrachloroethane (79-34-6)	X														*-2A
24V. Tetrachloroethylene (127-18-4)	X														*-2A
25V. Toluene (108-88-3)	X														*-2A
26V. 1,2-Dichloroethylene (156-60-5)	X														*-2A
27V. 1,1,1-Trichloroethane (71-55-6)	X														*-2A
28V. 1,1,2-Trichloroethane (79-00-5)	X														*-2A
29V. Trichloroethylene (79-01-6)	X														*-2A
30V. Trichlorofluoromethane (75-69-4)	X														*-2A
1V. Vinyl Chloride (75-01-4)	X														*-2A
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X														*-2A
2A. 2,4-Dichlorophenol (120-83-2)	X														*-2A
3A. 2,4-Dimethylphenol (106-67-9)	X														*-2A
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X														*-2A
5A. 2,4-Dinitrophenol (51-28-5)	X														*-2A
6A. 2-Nitrophenol (88-75-5)*	X														*-2A
7A. 4-Nitrophenol (100-02-7)	X														*-2A
8A. P-Chloro-M-Cresol (59-50-7)	X														*-2A
9A. Pentachlorophenol (87-86-5)	X														*-2A
10A. Phenol (108-95-2)	X														*-2A
11A. 2,4,6-Trichlorophenol (88-06-2)	X														*-2A

1. POLLUTANT NUMBER AND CAS (if available)	2. MARK A		3. EFFLUENT		4. UNITS		5. IF AVAILABLE		6. NO OF ANAL. VSES	
	NO. OF ANAL. VSES	CONC. (mg/l)	MAXIMUM DAILY VALUE (if available)	MAXIMUM (if available)	CONCENTRATION	CONCENTRATION	CONCENTRATION	CONCENTRATION		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS										
18 Acenaphthene (83 32 9)	X									*-2A
28 Acenaphthylene (206 96 8)	X									*-2A
38 Anthracene (120 12 7)	X									*-2A
48 Benzidine (92 87 6)	X									*-2A
58 Benzo (a) Anthracene (56 55 3)	X									*-2A
68 Benzo (a) Pyrene (50 32 8)	X									*-2A
78 3,4-Benzo-fluoranthene (205 99 2)	X									*-2A
88 Benzo (ghi) Perylene (191 24 2)	X									*-2A
98 Benzo (k) Fluoranthene (207 08 9)	X									*-2A
108 Bis (2 Chloro-ethoxy) Methane (111 91 1)	X									*-2A
118 Bis (2 Chloro-ethyl) Ether (111 44 4)	X									*-2A
128 Bis (2 Chloro-isopropyl) Ether (396 38 32 9)	X									*-2A
138 Bis (2 Ethyl-Hexyl) Phthalate (117 81 7)	X									*-2A
148 4-Bromo-phenyl Phenyl Ether (101 55 3)	X									*-2A
158 Butyl Benzyl Phthalate (80 68 7)	X									*-2A
168 2-Chloro-naphthalene (91 68 7)	X									*-2A
178 4-Chloro-phenyl Phenyl Ether (1006 72 3)	X									*-2A
188 Chrysene (218 01 9)	X									*-2A
198 Dibenzo (a,h) Anthracene (83 70 3)	X									*-2A
208 1,2-Dichloro-benzene (96 90 1)	X									*-2A
218 1,3-Dichloro-benzene (841 73 1)	X									*-2A

1. POLLUTANT AND CAS NUMBER (if available)	2. MAX. A. (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		3. EFFLUENT (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		4. UNITS (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		5. INTAKE (optional) (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		6. NO. OF ANAL. VSES	
	7. MAXIMUM DAILY VALUE (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		8. LONG TERM (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)		9. LONG TERM AVERAGE VALUE (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)					
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)										
22B. 1,4-Dichlorobenzene (106-46-7)	X									*-2A
23B. 3,3'-Dichlorobenzidine (91-94-1)	X									*-2A
24B. Diethylphthalate (84-66-2)	X									*-2A
25B. Di-n-butylphthalate (131-11-3)	X									*-2A
26B. Di-N-Butylphthalate (84-74-2)	X									*-2A
27B. 2,4-Dinitrotoluene (121-14-2)	X									*-2A
28B. 2,6-Dinitrotoluene (606-20-2)	X									*-2A
29B. Di-N-Octylphthalate (117-84-0)	X									*-2A
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)	X									*-2A
31B. Fluoranthene (206-44-0)	X									*-2A
32B. Fluorene (86-73-7)	X									*-2A
33B. Hexachlorobenzene (118-71-1)	X									*-2A
34B. Hexachlorobutadiene (87-68-3)	X									*-2A
35B. Hexachlorocyclopentadiene (177-47-4)	X									*-2A
36B. Hexachloroethane (67-72-1)	X									*-2A
37B. Indeno (1,2,3-d) Pyrene (1193-59-5)	X									*-2A
38B. Isophorone (78-55-1)	X									*-2A
39B. Naphthalene (91-20-3)	X									*-2A
40B. Nitrobenzene (98-95-3)	X									*-2A
41B. N-Nitrosodimethylamine (62-76-9)	X									*-2A
42B. N-Nitrosodi-N-Propylamine (62-64-7)	X									*-2A

CONTINUED F 1. POLLUTANT, NUMBER AND CAS (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. I. E. (optional)			
	100% QUA. NO. 1	50% QUA. NO. 2	CONC. AS GMS PER GAL	CONC. AS GMS PER GAL	B. MAXIMUM DAILY VALUE (1) MASS CONCENTRATION	B. MAXIMUM DAILY VALUE (2) MASS	C. LONG TERM AVERAGE VALUE (1) CONCENTRATION	C. LONG TERM AVERAGE VALUE (2) MASS	D. NO. OF ANAL. VSES	D. NO. OF ANAL. VSES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)										
438. N Nitro-sedobenzylamine (88-30-8)	X									
448. Phenanthrene (85-01-9)	X									
458. Pyrene (129-00-0)	X									
468. 1,2,4-Trichlorobenzene (120-82-1)	X									
GC/MS FRACTION - PESTICIDES										
1P. Aldrin (309-00-2)					X					
2P. α -BHC (319-84-8)					X					
3P. β -BHC (319-85-7)					X					
4P. γ -BHC (68-89-9)					X					
5P. δ -BHC (319-80-9)					X					
6P. Chlordane (87-74-9)					X					
7P. 4,4'-DDT (80-29-3)					X					
8P. 4,4'-DDE (72-55-9)					X					
9P. 4,4'-DDD (72-54-8)					X					
10P. Dieldrin (80-57-1)					X					
11P. α -Endosulfen (116-29-7)					X					
12P. β -Endosulfen (115-29-7)					X					
13P. Endosulfen Sulfate (1031-07-8)					X					
14P. Endrin (72-20-8)					X					
15P. Endrin Aldehyde (7421-93-4)					X					
16P. Heptachlor (78-44-8)					X					

EPA I.D. NUMBER (copy from Item 1 of Form 1) **NJ0025411** OUTFALL NUMBER **461B**

Form Approved OMB No. 158-R0173

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	B. TESTING REQUIRED	C. OBSERVED PRESENT	D. OBSERVED ABSENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	B. CONCENTRATION	b. MASS	B. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-87-3)			X												
18P. PCB-1242 (83469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-18-8)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11098-82-8)			X												
24P. PCB-1018 (12674-11-2)			X												
25P. Toxaphene (8001-36-2)			X												

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

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	b. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	NA	NA	*-2	mg/L	Kg	NA	NA	NA
b. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	100	41.6	NA	NA	NA	NA	*-1	mg/L	Kg	NA	NA	NA
e. Ammonia (as N)	0.12	0.03	NA	NA	NA	NA	*-1	mg/L	Kg	NA	NA	NA
f. Flow	VALUE 0.11 mgd		VALUE NA		VALUE 0.05		*-1	million gallons/day		VALUE NA		VALUE NA
g. Temperature (winter)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		VALUE NA
h. Temperature (summer)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		VALUE NA
i. pH	MINIMUM 6.0	MAXIMUM 9.0	MINIMUM NA	MAXIMUM NA	X		*-1	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	b. MAXIMUM DAILY VALUE		d. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X												
b. Chlorine, Total Residual		X												
c. Color	X		NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Fecal Coliform		X												
e. Fluoride (16984-48-8)	X											X		
f. Nitrate-Nitrite (as N)	X											X		

ITEM V-8 CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2 MARK 'X'		3. EFFLUENT				4. UNITS			5. INTAKE (optional)		NO. OF ANAL. VLS
	6. NO. ANALYSES SENT	7. NO. ANALYSES SENT	8. MAXIMUM DAILY VALUE		9. MAXIMUM 30 DAY VALUE (if available)		10. NO. OF ANAL. VSES	11. CONCENTRATION	12. MASS	13. INTAKE (optional)		
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)		X										
h. Oil and Grease	X		10	4.2	NA	NA	NA	mg/L	Kg	NA	NA	NA
i. Phosphorus (as P), Total (7723-14-0)	X											
J. Radioactivity												
(1) Alpha, Total		X										
(2) Beta, Total		X										
(3) Radium, Total		X										
(4) Radium 226, Total		X										
k. Sulfate (as SO ₄) (14808-79-8)	X											
l. Sulfide (as S)		X										
m. Sulfite (as SO ₃) (14266-46-3)		X										
n. Surfactants		X										
o. Aluminum, Total (7429-90-6)		X										
p. Barium, Total (7440-39-3)	X											
q. Boron, Total (7440-42-8)		X										
r. Cobalt, Total (7440-48-4)		X										
s. Iron, Total (7439-89-8)	X		1.0	0.42	NA	NA	NA	mg/L	Kg	NA	NA	NA
t. Magnesium, Total (7439-95-4)	X											
u. Molybdenum, Total (7439-98-7)		X										
v. Manganese, Total (7439-96-8)	X											
w. Tin, Total (7440-31-8)		X										
x. Titanium, Total (7440-32-8)		X										

NJ0025411

461-C

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)			X												
2M. Arsenic, Total (7440-38-2)		X											X		
3M. Barium, Total (7440-41-7)			X												
4M. Cadmium, Total (7440-43-9)		X											X		
5M. Chromium, Total (7440-47-3)		X											X		
6M. Copper, Total (7440-50-9)		X		0.2	0.08	NA	NA	NA	NA	*-1	mg/L	Kg	NA	NA	NA
7M. Lead, Total (7439-92-1)		X											X		
8M. Manganese, Total (7439-96-5)		X											X		
9M. Mercury, Total (7439-97-6)			X												
10M. Nickel, Total (7440-00-0)		X											X		
11M. Silver, Total (7440-00-2)			X												
12M. Vanadium, Total (7440-00-0)			X												
13M. Zinc, Total (7440-00-0)			X												

DICTIONARY

1. DESCRIBE RESULTS	X
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CONTINUED FROM THE FRONT

1. POLLUTANT AND GAS NUMBER (If available)	2. USE TO BE MADE OF THIS DATA (If available)	3. EFFLUENT D. MAXIMUM 30 DAY VALUE (If available)	4. UNITS		5. INT. AVERAGE VALUE (If concentration)		6. LONG TERM AVERAGE VALUE (If available)		7. NO. OF ANAL. YRS.	8. NO. OF ANAL. YRS.
			CONCENTRATION	D. MASS	(i) CONCEN. (ii) MASS	(i) CONCEN. (ii) MASS	(i) MASS	(i) MASS		
1V. Acrolein (107-92-6)	X									
2V. Acrylonitrile (107-13-1)	X									
3V. Benzene (71-43-2)	X									
4V. Bis (Chloromethyl) Ether (542-88-1)	X									
5V. Bromoform (76-26-2)	X									
6V. Carbon Tetrachloride (58-23-8)	X									
7V. Chlorobenzene (108-90-7)	X									
8V. Chloro-dibromomethane (124-48-1)	X									
9V. Chloroethane (78-00-3)	X									
10V. 2-Chloro-ethylmethyl Ether (115-76-9)	X									
11V. Chloroform (67-65-3)	X									
12V. Dichloro-bromomethane (78-27-4)	X									
13V. Dichloro-difluoromethane (78-71-8)	X									
14V. 1,1-Dichloro-ethane (78-34-3)	X									
15V. 1,2-Dichloro-ethane (107-06-2)	X									
16V. 1,1-Dichloro-ethylene (78-35-6)	X									
17V. 1,2-Dichloro-propene (78-87-5)	X									
18V. 1,3-Dichloro-propylene (542-78-6)	X									
19V. Ethylbenzene (100-41-4)	X									
20V. Methyl Bromide (74-83-9)	X									
21V. Methyl Chloride (74-87-3)	X									

CONTINUE ON PAGE V.5

PAGE V-4

PA Form 3510-2C (Rev. 12-80)
Previous edition may be used.

CONTINUED FROM

EV-4

EPA I.D. NUMBER (copy from Item 1 of Form 1)

NJ0025411

OUTFALL NUMBER

461-C

Form Approved OM

58-R0173

1. POLLUTANT AND CAS NUMBER (if available)	2. MANDATORY			3. EFFLUENT				4. UNITS		5. INTAKE (optional)						
	A. TEST IN-REQUIREMENT	B. DELIVERED PERCENT	C. DELIVERED AS PERCENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 3-DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)																
22V. Methylene Chloride (75-09-2)			X													
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X													
24V. Tetrachloroethylene (127-18-4)			X													
25V. Toluene (108-88-3)			X													
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X													
27V. 1,1,1-Trichloroethane (71-55-6)			X													
28V. 1,1,2-Trichloroethane (79-00-5)			X													
29V. Trichloroethylene (79-01-6)			X													
30V. Trichlorofluoromethane (75-69-4)			X													
31V. Vinyl Chloride (75-01-4)			X													
GC/MS FRACTION - ACID COMPOUNDS																
1A. 2-Chlorophenol (95-57-8)			X													
2A. 2,4-Dichlorophenol (120-83-2)			X													
3A. 2,4-Dimethylphenol (106-67-9)			X													
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X													
5A. 2,4-Dinitrophenol (51-28-5)			X													
6A. 2-Nitrophenol (98-75-5)			X													
7A. 4-Nitrophenol (100-02-7)			X													
8A. P-Chloro-M-Cresol (58-50-7)			X													
9A. Pentachlorophenol (87-86-5)			X													
10A. Phenol (108-95-2)			X													
11A. 2,4,6-Trichlorophenol (88-06-2)			X													

CONTINUED FROM THE FRONT

POLLUTANT AND CAS NUMBER (if available)	7. MARK 'X'		8. MAXIMUM DAILY VALUE		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		D. NO. OF ANAL. YES
	A. CAS NO.	B. CAS NO.	C. (i) CONCENTRATION	D. (ii) MASS	E. (i) CONCENTRATION	F. (ii) MASS	G. (i) CONCENTRATION	H. (ii) MASS	I. (i) CONCENTRATION	J. (ii) MASS	
BASE FRACTION - BASE/NEUTRAL COMPOUNDS											
1. Acenaphthene (33-22-8)		X									
2. Acenaphthylene (33-96-8)		X									
3. Anthracene (20-12-7)		X									
4. Benzidine (2-87-8)		X									
5. Benzo (a) Anthracene (16-85-3)		X									
6. Benzo (a) Pyrene (80-32-8)		X									
7. 3,4-Benzofluoranthene (106-98-2)		X									
8. Benzo (ghi) Perylene (191-24-2)		X									
9. Benzo (h) Fluoranthene (107-06-9)		X									
10. Bis (2-Chlorophenyl) Methane (11-81-1)		X									
11. Bis (2-Chlorophenyl) Ether (111-44-4)		X									
12. Bis (2-Chloropropyl) Ether (6438-32-8)		X									
13. Bis (2-Ethylhexyl) Phthalate (117-81-7)		X									
14. 4-Bromo-phenyl Phenyl ether (101-85-3)		X									
15. Butyl Benzyl Phthalate (88-68-7)		X									
16. 2-Chloro-naphthalene (11-88-7)		X									
17. 4-Chlorophenyl Phenyl ether (7008-73-3)		X									
18. Chrysene (218-01-8)		X									
19. Dibenz (a,h) Anthracene (33-70-3)		X									
20. 1,2-Dichlorobenzene (88-60-1)		X									
21. 1,2-Dichlorobenzene (841-73-1)		X									

CONTINUE ON PAGE V-7

PAGE V-6

A Form 3510-2C (6-80)

E V-6

CONTINUED FRC

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		
	U.S. ENVIRONMENTAL PROTECTION AGENCY	STATE	(i) CONCENTRATION	(ii) MASS	S. CONCENTRATION	D. MASS	A. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS	B. NO. OF ANAL. YES	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)									
228. 1,4-Dichlorobenzene (106-46-7)		X							
238. 3,3'-Dichlorobenzidine (91-94-1)		X							
248. Diethyl Phthalate (84-66-2)		X							
258. Dimethyl Phthalate (131-11-3)		X							
268. Di-N-Butyl Phthalate (84-74-2)		X							
278. 2,4-Dinitrotoluene (121-14-2)		X							
288. 2,6-Dinitrotoluene (908-20-2)		X							
298. Di-N-Octyl Phthalate (117-84-0)		X							
308. 1,2-Diphenylhydrazine (as Arp-benzene) (122-66-7)		X							
318. Fluoranthene (208-44-0)		X							
328. Fluorene (86-73-7)		X							
338. Hexachlorobenzene (118-71-1)		X							
348. Hexachlorobutadiene (87-68-3)		X							
358. Hexachlorocyclopentadiene (77-47-4)		X							
368. Hexachloroethane (87-72-1)		X							
378. Indeno (1,2,3-cd) Pyrene (193-20-6)		X							
388. Isophorone (78-59-1)		X							
398. Naphthalene (91-20-3)		X							
408. Nitrobenzene (98-95-3)		X							
418. N-Nitrosodimethylamine (62-75-8)		X							
428. N-Nitrosodi-N-Propylamine (621-64-7)		X							

CONTINUED FROM PAGE 9000

POLLUTANT NUMBER (if available)	ARK #	C. USE-RELATED QUANTITY	3. EFFLUENT		4. UNITS		5. INTAKE	6. NO. OF ANALYSES	
			D. MAXIMUM DAILY VALUE (if available)	E. MAXIMUM 30 DAY VALUE (if available)	B. CONCENTRATION	D. MASS			A. LONG TERM AVERAGE VALUE (if available)
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS
BASE/NEUTRAL COMPOUNDS (continued)									
B. N-Nitro- Dibenzylamine 3-50-6)		X							
B. Phosacetone 3-01-6)		X							
B. Pyrene 3-00-6)		X							
B. 1,2,4-Tri- terobenzene 3-02-1)		X							
PESTICIDES									
Aldrin 3-00-2)		X							
C-BHC 3-04-6)		X							
β-BHC 3-05-7)		X							
γ-BHC 3-05-8)		X							
δ-BHC 3-05-8)		X							
Chlordane 3-74-6)		X							
4,4'-DDE 3-29-37)		X							
4,4'-DDE 3-28-6)		X							
4,4'-DDD 3-24-6)		X							
P. Dieldrin 3-07-1)		X							
P. D-Endosulfan 3-20-7)		X							
P. β-Endosulfan 3-20-7)		X							
P. Endosulfan 3-20-8)		X							
P. Endrin 3-20-8)		X							
P. Endrin 3-20-8)		X							
P. Endrin 3-20-8)		X							
P. Heptachlor 3-44-6)		X							

CONTINUE ON PAGE V-9

PAGE V-8

Form 3510-2C (8-80)

EPA I.D. NUMBER (copy from Item 1 of Form 1) **OUTFALL NUMBER**
NJ0025411 **461-C**

CONTINUED FROM PAGE V-8

POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
	TEST NO. (if available)	DATE TESTED	B. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	B. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	A. CONCENTRATION	B. MASS	A. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	B. NO. OF ANALYSES
MS FRACTION - PESTICIDES (continued)								
Heptachlor Epoxide 4-67-3								
PCB-1242 69-21-8		X						
PCB-1254 67-69-1		X						
PCB-1221 04-28-2		X						
PCB-1232 41-16-5		X						
PCB-1246 72-29-6		X						
PCB-1260 66-82-6		X						
PCB-1016 74-11-2		X						
Toluene 1-38-3		X						X

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

EPA ID. NUMBER (copy from Item 1 of Form 1)

NJ0025411

STORM DRAIN NORTH

(non-process)

Form Approved OMB No. 158-R0173

OUTFALL NO.

462A

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			b. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
1. Biochemical Oxygen Demand (BOD ₅)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
2. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
3. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
4. Total Suspended Solids (TSS)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
5. Ammonia (as N)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
6. Flow	VALUE 1.623		VALUE NA		VALUE 0.201		*-5	million gallons per day	VALUE NA			NA
7. Temperature (winter)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C	VALUE NA		NA	
8. Temperature (summer)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C	VALUE NA		NA	
9. pH	MINIMUM NA	MAXIMUM NA	MINIMUM NA	MAXIMUM NA	X		*-4	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. NO. OF PRESENT	b. NO. OF ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			b. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)		X							*-4					
b. Chlorine, Total Residual		X							*-4					
c. Color	X								*-4					
d. Fecal Coliform		X							*-4					
e. Fluoride (16904-48-8)		X							*-4					
f. Nitrate-Nitrite (as N)	X								*-4					

1. POLLUTANT AND CAS NO. (if available)	2. <small>USE FOR SENT</small>	3. <small>WTR</small>	3. EFFLUENT						7. NO. OF ANALYSES	4. UNITS		5. INT/ (optional)		
			8. MAXIMUM DAILY VALUE		9. MAXIMUM 30 DAY VALUE <small>(if available)</small>		10. AVERAGE VALUE <small>(if available)</small>			6. CONCENTRATION	11. MASS	12. LONG AVERAGE		13. NO. OF ANALYSES
			(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS				(i) CONCENTRATION	(ii) MASS	
a. Nitrogen, Total Organic (as N)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
b. Oil and Grease	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Phosphorus (P), Total 7723 14 01	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Radioactivity														
1) Alpha, Total		X												
2) Beta, Total		X												
3) Radium, Total		X												
4) Radium-226, Total		X												
Sulfate (SO ₄) 14010 79 81		X												
Sulfide (S ₂)		X												
Sulfite (SO ₃) 14206 45 31		X												
Surfactants		X												
Aluminum, total 7429 90 51		X												
Barium, total 7440 39 31		X												
Boron, total 7440 42 81		X												
Cobalt, total 7440 40 41		X												
Iron, Total 7439 89 61	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Magnesium, total 7439 96 41	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Molybdenum, total 7439 58 71		X												
Manganese, total 7439 96 51	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Tin, Total 7440 31 51		X												
Titanium, total 7440 32 61		X												

NJ0025411

462A

CONTINUED FROM PAGE 3 OF FORM 2 C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				6. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)			
	a. GC/MS FRACTION	b. PRESENT	c. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)			c. LONG TERM AVG. VALUE (if available)	a. CONCENTRATION	b. MASS	b. LONG TERM AVERAGE VALUE		c. NO. ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS														
1M Arsenopy, Total (7440-36-0)			X											
2M Arsenic, Total (7440-30-2)			X											
3M Beryllium, Total (7440-41-7)			X											
4M Cadmium, Total (7440-44-9)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA
5M Chromium, Total (7440-47-3)			X											
6M Copper, Total (7550-50-8)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA
7M Lead, Total (7439-92-1)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA
8M Mercury, Total (7439-97-6)			X											
9M Nickel, Total (7440-02-0)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA
10M Selenium, Total (7782-49-2)			X											
11M Silver, Total (7440-22-4)			X											
12M Thallium, Total (7440-28-0)			X											
13M Zinc, Total (7440-66-6)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA
14M Cyanide, Total (77-12-5)			X											
15M Phenols, Total			X											
DIOXIN														
2,3,7,8 Tetrachlorodibenzo-p-dioxin (174-01-6)			X	DESCRIBE RESULTS										

1. POLLUTANT NUMBER AND CAS NUMBER (if available)	2. MARK 'X' (if associated with this report)	3. EFFLUENT			4. UNITS		5. INTAKE (optional)		
		a. MAXIMUM DAILY VALUE (i) MASS (ii) CONCENTRATION	b. MAXIMUM 30 DAY VALUE (i) CONCENTRATION (ii) AVERAGE VALUE	c. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS	d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS	b. NO. OF ANALYSES
1V. Acetone (107-13-1)	X								
2V. Acrylonitrile (107-13-1)	X								
3V. Benzene (71-43-2)	X								
4V. Ethylbenzene (100-41-4)	X								
5V. Carbon Tetrachloride (78-11-3)	X								
6V. Chlorobenzene (106-90-7)	X								
7V. Chloroethane (78-00-3)	X								
8V. Chloroethane (124-48-1)	X								
9V. Chloroethane (78-00-3)	X								
10V. 2-Chloroethylvinyl ether (110-75-8)	X								
11V. Chloroethane (78-00-3)	X								
12V. Dichlorobromomethane (78-27-4)	X								
13V. Dichlorodifluoromethane (78-71-8)	X								
14V. 1,1-Dichloroethane (78-34-3)	X								
15V. 1,2-Dichloroethane (107-06-3)	X								
16V. 1,1-Dichloroethylene (78-08-4)	X								
17V. 1,2-Dichloropropane (78-27-8)	X								
18V. 1,3-Dichloropropane (100-41-4)	X								
19V. Methyl Chloride (74-87-3)	X								
20V. Methyl Chloride (74-87-3)	X								

1. POLLUTANT AND GAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	6. NO. OF ANAL. YES	7. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	8. ND. OF ANAL. YES
	8. MAXIMUM DAILY VALUE (i) concentration (ii) mass	9. MAXIMUM 30 DAY VALUE (i) concentration (ii) mass	10. CONCENTRATION	11. MASS	12. CONCENTRATION	13. MASS				
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)										
22V. Methylene Chloride (78-09-2)		X								
23V. 1,1,2,2-Tetrachloroethane (79-34-6)		X								
24V. Tetrachloroethylene (127-18-4)		X								
26V. Toluene (108-88-3)		X								
28V. 1,2-Dichloroethane (156-60-8)		X								
27V. 1,1,1-Trichloroethane (71-55-6)		X								
28V. 1,1,2-Trichloroethane (79-00-6)		X								
29V. Trichloroethylene (79-01-6)		X								
30V. Trichlorofluoromethane (75-69-4)		X								
31V. Vinyl Chloride (75-01-4)		X								
GC/MS FRACTION - ACID COMPOUNDS										
1A. 2-Chlorophenol (95-57-9)		X								
2A. 2,4-Dichlorophenol (120-83-2)		X								
3A. 2,4-Dimethylphenol (106-67-9)		X								
4A. 4,6-Dinitro-Cresol (634-52-1)		X								
5A. 2,4-Dinitrophenol (61-28-5)		X								
6A. 2-Nitrophenol (88-78-6)		X								
7A. 4-Nitrophenol (100-06-7)		X								
8A. P-Chloro-M-Cresol (59-50-7)		X								
9A. Penta-chloro-phenol (87-86-5)		X								
10A. Phenol (108-95-2)		X								
11A. 2,4,6-Trichlorophenol (88-06-2)		X								

CONTINUED FROM THE FRONT

POLLUTANT AND CAS NUMBER (if available)	ARK X D.S. C.S. S.S. P.S. M.S.	3. EFFLUENT B. MAXIMUM DAILY VALUE (i) CONCENTRATION (ii) MASS		3. TERM AVERAGE VALUE (if available) (i) CONCENTRATION (ii) MASS		4. UNITS B. CONCENTRATION B. MASS		5. INTAKE B. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS		D. NO. OF ANAL. YRS	E. NO. OF ANAL. YRS	
		(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS			
CMS FRACTION - BASE/NEUTRAL COMPOUNDS												
1. Acetophenone (85-86-3)												
2. Acenaphthylene (83-32-8)												
3. Acenaphthylene (83-32-8)												
4. Aniline (62-76-0)												
5. Benzidine (103-94-8)												
6. Benzidine (103-94-8)												
7. Benzidine (103-94-8)												
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92. Benzidine (103-94-8)												
93. Benzidine (103-94-8)												
94. Benzidine (103-94-8)												
95. Benzidine (103-94-8)												
96. Benzidine (103-94-8)												
97. Benzidine (103-94-8)												
98. Benzidine (103-94-8)												
99. Benzidine (103-94-8)												
100. Benzidine (103-94-8)												

CONTINUE ON PAGE V-7

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' IN THE APPROPRIATE BOXES		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		
	1. PRESENT	2. EXCEEDS LIMIT	3. MAXIMUM DAILY VALUE (i) CONCENTRATION (ii) MASS	4. LONG TERM (if available) (i) CONCENTRATION (ii) MASS	5. HO. OF ANAL. YES	6. CONCENTRATION	7. MASS	8. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS	9. NO. OF ANAL. YES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)									
238. 1,4-Dichlorobenzene (106-48-7)		X							
238. 3,3'-Dichlorobenzidine (91-94-1)		X							
248. Diethyl Phthalate (84-66-2)		X							
268. Dimethyl Phthalate (131-11-3)		X							
268. Di-N-Butyl Phthalate (84-74-2)		X							
278. 2,4-Dinitrotoluene (121-14-2)		X							
288. 2,6-Dinitrotoluene (808-20-2)		X							
298. Di-N-Octyl Phthalate (117-84-0)		X							
308. 1,2-Diphenylhydrazine (as Azobenzene) (122-65-7)		X							
318. Fluoranthene (208-44-0)		X							
328. Fluorene (86-73-7)		X							
338. Hexachlorobenzene (118-71-1)		X							
348. Hexachlorobutadiene (87-68-3)		X							
368. Hexachlorocyclopentadiene (77-47-4)		X							
368. Hexachloroethane (87-72-1)		X							
378. Indeno (1,2,3-cd) Pyrene (193-39-5)		X							
388. Isophorone (78-89-1)		X							
398. Naphthalene (91-20-3)		X							
408. Nitrobenzene (98-96-3)		X							
418. N-Nitrosodimethylamine (62-78-9)		X							
428. N-Nitrosodimethylamine (62-78-9)		X							
428. N-Nitrosodimethylamine (62-78-9)		X							

CONTINUED FRC 1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'K' USE IN CALCULATIONS OR AS A RE MARK		3. EFFLUENT b. MAXIMUM DAILY VALUE (if available)		3. INTA (optional) a. LONG TERM AVERAGE VALUE (i) CONCENTRATION (j) MASS		4. UNITS a. CONCENTRATION b. MASS		5. NO. OF ANALYSES		
	(i) CONCENTRATION	(j) MASS	(i) CONCENTRATION	(j) MASS	(i) CONCENTRATION	(j) MASS	(i) CONCENTRATION	(j) MASS	(i) CONCENTRATION	(j) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)											
43B, N-Nitro- sodibenzenamine (86-30-6)											
44B, Phenanthrene (89-01-8)											
46B, Pyrene (129-00-6)											
48B, 1,2,4- chlorobenzene (120-82-1)											
GC/MS FRACTION - PESTICIDES											
1P, Alarin (309-00-3)											
2P, d-9H-6 (319-84-8)											
3P, β-9H-6 (319-86-7)											
4P, γ-9H-6 (319-86-8)											
5P, δ-9H-6 (319-86-9)											
6P, Chlorobenzene (97-74-9)											
7P, 2,4'-DDT (69-29-9)											
8P, 4,4'-DDT (72-86-9)											
9P, 4,4'-DDB (72-84-8)											
10P, Dieldrin (60-57-1)											
11P, Dendrothion (115-29-7)											
12P, β-Ethionin (115-29-7)											
13P, Endosulfan Sulfate (1021-07-2)											
14P, Endosulfan (72-20-9)											
15P, Endosulfan Aldehyde (7421-93-1)											
16P, Endosulfan Sulfonamide (76-14-9)											

EPA I.D. NUMBER (copy from Item 1 of Form 1) NJ0025411

OUTFALL NUMBER 462A

Form Approved OMB No. 158-R0173

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. DE-LISTED PRESENT	C. DE-LISTED AS-SAY	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-87-3)			X												
18P. PCB-1242 (83480-21-9)			X												
19P. PCB-1254 (11097-89-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-18-5)			X												
22P. PCB-1248 (12672-25-8)			X												
23P. PCB-1260 (11088-82-4)			X												
24P. PCB-1016 (12674-13)			X												
25P. Toxaphene (5001-36-2)			X												

V. Intake and Effluent Characteristics-Outfall No.462B

Part A.

*Maximum mass for sewage plant pollutants are estimated maximums; instantaneous maximums for flow and pollutant concentrations were used to calculate this value, but their simultaneous occurrence did not actually take place.

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)
 NJ0025411

Sewage Treatment System (non-process)
 Form Approved OMB No. 158-R0173

OUTFALL NO
 462B

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			b. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	33.0	8.7*	NA	NA	NA	NA	1	mg/L	Kg	NA	NA	NA
b. Chemical Oxygen Demand (COD)	80.0	21.1	NA	NA	NA	NA	*-6	mg/L	Kg	NA	NA	NA
c. Total Organic Carbon (TOC)	102.0	26.9	NA	NA	NA	NA	*-6	mg/L	Kg	NA	NA	NA
d. Total Suspended Solids (TSS)	38	10.0	29	1.7	NA	NA	1	mg/L	Kg	NA	NA	NA
e. Ammonia (as N)	28.8	7.6	NA	NA	NA	NA	*-6	mg/L	Kg	NA	NA	NA
f. Flow	VALUE 70,000		VALUE 50,700		VALUE NA		continuous	gallons per day		VALUE NA		NA
g. Temperature (winter)	VALUE Ambient		VALUE Ambient		VALUE NA		NA	°C		VALUE NA		NA
h. Temperature (summer)	VALUE Ambient		VALUE Ambient		VALUE NA		NA	°C		VALUE NA		NA
i. pH	MINIMUM 7.0	MAXIMUM 8.0	MINIMUM 7.2	MAXIMUM 7.9	VALUE		1	STANDARD UNITS		VALUE		NA

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. BY PRESENT	b. BY ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	b. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-87-9)		X												
b. Chlorine, Total Residual	X		2.8	0.7	2.5	0.2	NA	NA	1	mg/L	Kg	NA	NA	NA
c. Color	X		195	NA	NA	NA	NA	NA	1	c.u.	NA	NA	NA	NA
d. Fecal Coliform	X		confluent growth	NA	NA	NA	NA	NA	1	colonies per 100ml	NA	NA	NA	NA
e. Fluoride (18984-48-8)	X		NA	NA	NA	NA	NA	NA	NA	NA	NA	X	NA	NA
f. Nitrate-Nitrite (as N)	X		55.0	14.5	NA	NA	NA	NA	1	mg/L	Kg	0.34	NA	1

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS			5. INTAKE (optional)		
	b. s. s. LAVER ISSUED (see 807)		b. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVERAGE VALUE (if available)		R. CONCENTRATION	D. MASS	AVERAGE VALUE	
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				
b. Nitrogen, Total Organic (as N)	X		30.4	8.0	NA	NA	NA	mg/L	Kg	NA	NA	
c. Oil and Grease	X		12.8	3.4	NA	NA	NA	mg/L	Kg	NA	NA	
d. Phosphorus (as P), Total (7723-14-0)	X		1.3	0.3	NA	NA	NA	mg/L	Kg	0.78	NA	
J. Radioactivity												
(1) Alpha, Total		X										
(2) Beta, Total		X										
(3) Radium, Total		X										
(4) Radium-226, Total		X										
k. Sulfate (as SO4) (114808-79-8)	X		58.0	15.3	NA	NA	NA	mg/L	Kg	1.4	NA	
l. Sulfide (as S) (7513-14-8)	X		< 0.5	NA	NA	NA	NA	mg/L	Kg	NA	NA	
m. Sulfite (as SO3) (114286-66-3)		X										
n. Sulfonate (as S) (7513-14-8)	X		0.9	0.2	NA	NA	NA	mg/L	Kg	NA	NA	
o. Aluminum, Total (7429-90-8)		X										
p. Barium, Total (7440-39-3)		X										
q. Beryllium, Total (7440-42-8)		X										
r. Cobalt, Total (7440-48-4)		X										
s. Iron, Total (7439-89-6)	X		NA	NA	NA	NA	NA	mg/L	Kg	1.2	NA	
t. Magnesium, Total (7439-96-4)	X		2.13	0.6	NA	NA	NA	mg/L	Kg	11.5	NA	
u. Molybdenum, Total (7439-96-7)		X										
v. Manganese, Total (7439-96-8)	X		< 0.5	NA	NA	NA	NA	mg/L	Kg	0.003	NA	
w. Tin, Total (7440-31-9)		X										
x. Thallium, Total (7440-32-8)		X										

NJ0025411

462B

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols, if you are not required to mark column 2-a (*secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING EQUIP.	B. RECEIVED PRESENT	C. RECEIVED ADJ. PRESENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	B. CONCENTRATION	D. MASS	E. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-38-0)			X												
2M. Arsenic, Total (7440-38-2)		X											X		
3M. Beryllium, Total, 7440-41-7)			X												
4M. Cadmium, Total (7440-43-9)		X											X		
5M. Chromium, Total (7440-47-3)		X											X		
6M. Copper, Total (7550-80-8)		X		<0.05	NA	NA	NA	NA	NA	*-6	mg/L	Kg	X	NA	NA
7M. Lead, Total (7439-92-1)		X											X		
8M. Mercury, Total (7439-97-8)		X											X		
9M. Nickel, Total (7440-02-0)			X												
10M. Selenium, Total (7782-49-2)		X											X		
11M. Silver, Total (7440-22-4)		X											X		
12M. Thallium, Total (7440-28-0)			X												
13M. Zinc, Total (7440-66-8)			X												
14M. Cyanide, Total (57-12-5)			X												
15M. Phenols, Total			X												
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER <i>(if available)</i>	MARK 'X'			3. EFFLUENT				4. UNITS		5. IN...KE (optional)				
	B. TYPE OF ANALYSIS	D. DE-ALYDATION	C. RE-ALYDATION	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE <i>(if available)</i>		C. LONG TERM AVG. VALUE <i>(if available)</i>		E. CONCENTRATION	D. MASS	A. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS														
1V. Acrolein (107-02-8)			X											
2V. Acrylonitrile (107-13-1)			X											
3V. Benzene (71-43-2)			X											
4V. Bis (Chloromethyl) Ether (842-88-1)			X											
5V. Bromoform (75-25-2)			X											
6V. Carbon Tetrachloride (56-23-5)			X											
7V. Chlorobenzene (108-90-7)			X											
8V. Chlorobromomethane (124-48-1)			X											
9V. Chloroethane (75-00-3)			X											
10V. 2-Chloroethylvinyl Ether (110-78-8)			X											
11V. Chloroform (67-66-3)			X											
12V. Dichlorobromomethane (75-27-4)			X											
13V. Dichlorodifluoromethane (75-71-8)			X											
14V. 1,1-Dichloroethane (78-34-3)			X											
15V. 1,2-Dichloroethane (107-06-2)			X											
16V. 1,1-Dichloroethylene (78-36-4)			X											
17V. 1,2-Dichloropropane (78-87-8)			X											
18V. 1,3-Dichloropropylene (542-78-6)			X											
19V. Ethylbenzene (100-41-4)			X											
20V. Methyl Bromide (74-83-9)			X											
21V. Methyl Chloride (74-87-3)			X											

CONTINUED FROM

E V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TEST INQUIRY	D. SEWERAGE	C. SEWERAGE	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE		H. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-5)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (106-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-00-2)			X												

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'R' (CAS NO., REG. NO., EPCRA 261, etc.)	3. EFFLUENT		4. UNITS		5. INTAKE (optional)		
		B. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	D. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	CONCENTRATION (1) MASS	D. MASS	LONG-TERM AVERAGE (1) CONCENTRATION (2) MASS	D. NO. OF ANAL. YSES	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS								
18. Acenaphthene (83-32-8)		X						
28. Acenaphthylene (208-98-8)		X						
38. Anthracene (120-12-7)		X						
48. Benzidine (92-87-8)		X						
58. Benzo (a) Anthracene (95-55-3)		X						
68. Benzo (a) Pyrene (80-32-8)		X						
78. 3,4-Benzo-Fluoranthene (205-99-2)		X						
88. Benzo (ghi) Perylene (191-24-2)		X						
98. Benzo (h) Fluoranthene (207-08-9)		X						
108. Bis (2-Chloroethyl) Methane (111-81-1)		X						
118. Bis (2-Chloroethyl) Ether (111-44-4)		X						
128. Bis (2-Chloropropyl) Ether (38638-32-8)		X						
138. Bis (2-Ethylhexyl) Phthalate (117-81-7)		X						
148. 4-Bromophenyl Phenyl Ether (101-88-3)		X						
188. Butyl Benzylo Phthalate (88-88-7)		X						
188. 2-Chloronaphthalene (81-58-7)		X						
178. 4-Chlorophenyl Phenyl Ether (7008-72-3)		X						
188. Chrysenes (218-01-8)		X						
188. Dibenzo (a,h) Anthracene (83-70-3)		X						
208. 1,2-Dichlorobenzene (98-90-1)		X						
218. 1,2-Dichlorobenzene (841-73-1)		X						

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (options)	
	U.S. EPA	STATE	MAXIMUM DAILY VALUE (if available)	CONCENTRATION	CONCENTRATION	CONCENTRATION	CONCENTRATION	CONCENTRATION
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)								
22B. 1,4-Dichlorobenzene (106-46-7)		X						
23B. 3,3'-Dichlorobenzidine (91-94-1)		X						
24B. Diethyl Phthalate (84-96-2)		X						
25B. Dimethyl Phthalate (131-11-3)		X						
26B. Di-N-Butyl Phthalate (84-74-2)		X						
27B. 2,4-Dinitrotoluene (121-14-2)		X						
28B. 2,6-Dinitrotoluene (606-20-2)		X						
29B. Di-N-Octyl Phthalate (117-84-0)		X						
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)		X						
31B. Fluorene (206-44-0)		X						
32B. Fluorene (86-73-7)		X						
33B. Hexachlorobenzene (118-71-1)		X						
34B. Hexachlorobutadiene (87-68-3)		X						
35B. Hexachlorocyclopentadiene (77-47-6)		X						
36B. Hexachloroethane (67-72-1)		X						
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)		X						
38B. Isophorone (78-58-1)		X						
39B. Naphthalene (91-20-3)		X						
40B. Nitrobenzene (98-96-3)		X						
41B. N-Nitrosodimethylamine (62-76-9)		X						
42B. N-Nitrosodi-N-Propylamine (621-64-7)		X						

CONTINUED FROM	FRONT		3 EFFLUENT		4 UNITS		5 INT/ optional)	
	1. POLLUTANT AND CAS NUMBER (if available)	MARK 'X' (if available)	2. MAXIMUM DAILY VALUE (continued)	3. MAXIMUM 30 DAY VALUE (if available)	4. CONCENTRATION	5. LONG TERM AVERAGE VALUE (if available)	6. NO. OF ANAL. YSES	7. LONG TERM AVERAGE VALUE (if available)
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)								
43B. N-Nitrosodiphenylamine (88-30-8)	X							
44B. Phenanthrene (88-01-8)	X							
45B. Pyrene (129-00-0)	X							
46B. 1,2,4-Trichlorobenzene (120-82-1)	X							
GC/MS FRACTION - PESTICIDES								
1P. Aldrin (309-00-3)	X							
2P. D-BHC (319-84-8)	X							
3P. β -BHC (319-86-7)	X							
4P. γ -BHC (86-89-8)	X							
5P. δ -BHC (319-86-8)	X							
6P. Chlordane (87-74-8)	X							
7P. 4,4'-DDE (80-29-3)	X							
8P. 4,4'-DDE (72-85-8)	X							
9P. 4,4'-DDD (72-84-8)	X							
10P. Dieldrin (80-87-1)	X							
11P. α -Endosulfan (118-29-7)	X							
12P. β -Endosulfan (118-29-7)	X							
13P. Endosulfan Sulfate (1031-07-8)	X							
14P. Endrin (72-20-8)	X							
15P. Endrin Aldehyde (7421-93-4)	X							
16P. Heptachlor (78-44-8)	X							

EPA I.D. NUMBER (copy from Item 1 of Form 1) **NJ0025411** OUTFALL NUMBER **462B**

Form Approved OMB No. 158-R0173

CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. TESTING REQUIRED	b. DERIVED FROM SENT	c. DERIVED FROM ASSENT	6. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	6. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-87-3)			X												
18P. PCB-1242 (83489-21-9)			X												
19P. PCB-1254 (11097-86-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-6)			X												
22P. PCB-1248 (12672-28-6)			X												
23P. PCB-1260 (11006-82-5)			X												
24P. PCB-1016 (12874-11-2)			X												
25P. Toxaphene (8001-36-2)	X													X	

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(NON-PROCESS) Form Approved EPA No. 158-R0173

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OUTFALL #

463A

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2 C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

I. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			a. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
b. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
e. Ammonia (as N)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
f. Flow	VALUE 1.525		VALUE NA		VALUE 0.189		*-5	million gallons per day	VALUE NA	VALUE NA		NA
g. Temperature (winter)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C	VALUE NA		VALUE NA	
h. Temperature (summer)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C	VALUE NA		VALUE NA	
i. pH	MINIMUM NA	MAXIMUM NA	MINIMUM NA	MAXIMUM NA	X		*-4	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

I. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						d. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			a. CONCENTRATION	b. MASS	e. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	
a. Bromine (24959 67 9)		X												
b. Chlorine, Total Residual		X												
c. Color	X													
d. Fecal Coliform		X												
e. Fluoride (16104 48 8)		X												
f. Nitrate-Nitrite (as N)	X													

I. POLLUTANT AND CAS NO. (if available)	SHK *X		3. EFFLUENT						4. UNITS		5. INITIAL (optional)			
	A. NO. ANALYSES PRESENT	B. NO. ANALYSES ABSENT	8. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		I. NO. OF ANALYSES	8. CONCENTRATION	D. MASS	B. LONG TERM AVERAGE VALUE		I. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
h. Oil and Grease	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
i. Phosphorus (as P), Total (7723-14-0)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
j. Radioactivity														
(1) Alpha, Total		X												
(2) Beta, Total		X												
(3) Radium, Total		X												
(4) Radium 226, Total		X												
k. Sulfate (as SO ₄) (14006-79-8)		X												
l. Sulfide (as S)		X												
m. Sulfite (as SO ₃) (14206-45-3)		X												
n. Surfactants		X												
o. Aluminum, Total (7429-90-5)		X												
p. Barium, Total (7440-39-3)		X												
q. Boron, Total (7440-42-8)		X												
r. Cobalt, Total (7440-48-4)		X												
s. Iron, Total (7439-89-6)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
t. Magnesium, Total (7439-95-4)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
u. Molybdenum, Total (7439-98-7)		X												
v. Manganese, Total (7439-96-5)	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
w. Tin, Total (7440-31-5)		X												
x. Titanium, Total (7440-32-6)		X												

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463A

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	2-a GC/MS FRACTION	2-b GC/MS FRACTION	2-c GC/MS FRACTION	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		f. NO OF ANALYSES	g. CONCENTRATION	h. MASS	e. LONG TERM AVERAGE VALUE		i. NO OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS						
METALS, CYANIDE, AND TOTAL PHENOLS															
185 Arsenic, Total (7440-36-0)			X												
285 Arsenic, Total (7440-36-0)			X												
385 Beryllium, Total (7430-41-7)			X												
475 Cadmium, Total (7440-43-9)	X			NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
585 Chromium, Total (7440-47-3)			X												
685 Copper, Total (7550-50-8)	X			NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
785 Lead, Total (7439-92-1)	X			NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
885 Mercury, Total (7439-97-6)			X												
985 Nickel, Total (7440-02-0)	X			NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
1085 Selenium, Total (7782-49-2)			X												
1185 Silver, Total (7440-22-4)			X												
1285 Platinum, Total (7440-28-0)			X												
1385 Zinc, Total (7440-66-6)	X			NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
1485 Cyanide, Total (57-12-5)			X												
1585 Phenols, Total			X												
DIOXIN															
2375 Toxin (2,3,7,8-TCDF) (1746-01-6)			X	DESCRIBE RESULTS											

CONTINUED FRC 1. POLLUTANT AND GAS NUMBER (if available)	2. MARK 'A'		3. EFFLUENT		4. UNITS		5. IN 1		.E (optional)	D. NO. OF ANAL- YSES
	D. TEST METH- OD	C. TEST METH- OD	B. MAXIMUM DAILY VALUE (if available)	D. MAXIMUM 30 DAY VALUE (if available)	C. LONG TERM AVG. VALUE (if available)	A. CONCENTRATION	B. MASS	A. LONG TERM AVERAGE VALUE (1) CONCENTRATION		
GC/MS FRACTION - VOLATILE COMPOUNDS										
1V. Acrolein (107-02-8)		X								
2V. Acrylonitrile (107-13-1)		X								
3V. Benzene (71-43-2)		X								
4V. Bis (Chloro- methyl) Ether (842-88-1)		X								
5V. Bromoform (75-28-2)		X								
6V. Carbon Tetrachloride (88-23-8)		X								
7V. Chlorobenzene (108-90-7)		X								
8V. Chloro- bromomethane (124-48-1)		X								
9V. Chloroethane (75-00-3)		X								
10V. 2-Chloro- ethylvinyl Ether (110-75-8)		X								
11V. Chloroform (87-68-3)		X								
12V. Dichloro- bromomethane (78-27-4)		X								
13V. Dichloro- difluoromethane (78-71-8)		X								
14V. 1,1-Dichloro- ethane (78-34-3)		X								
15V. 1,2-Dichloro- ethane (107-06-2)		X								
16V. 1,1-Dichloro- ethylene (75-26-4)		X								
17V. 1,2-Dichloro- propane (78-87-5)		X								
18V. 1,3-Dichloro- propane (842-78-6)		X								
19V. Ethylbenzene (100-41-4)		X								
20V. Methyl Bromide (74-83-9)		X								
21V. Methyl Chloride (74-87-3)		X								

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. IN. MAKE (optional)			
	A. LISTED INQUIRY	B. BELIEVED PRESENT	C. BELIEVED ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	B. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (76-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-8)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (98-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (106-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. p-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-86-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-06-2)			X												

1. POLLUTANT AND CAS NUMBER (if available)	MARK 'X' (D, M, S, W, T, F, S, R, A, B, C, E, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z)	3. EFFLUENT		4. UNITS		5. INTA (optional)		6. NO. OF ANAL. VSES
		D. MAXIMUM 30 DAY VALUE (if available)	E. MAXIMUM DAILY VALUE (if available)	B. CONCENTRATION	L. MASS	A. LONG-TERM AVERAGE (if concentration)	J. MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS								
12. Acenaphthene (83-32-9)								
28. Acenaphthylene (208-96-8)								
38. Anthracene (120-12-7)								
48. Benzidole (82-87-8)								
98. Benzo (a) Anthracene (85-56-3)								
88. Benzo (a) Pyrene (50-32-8)								
78. 3,4-Benzo-fluoranthene (208-98-2)								
88. Benzo (ghi) Perylene (191-24-2)								
98. Benzo (h) Fluoranthene (207-08-9)								
106. Bis (2-Chloro-ethyl) Methane (111-81-1)								
118. Bis (2-Chloro-ethyl) Ether (111-44-4)								
128. Bis (2-Chloro-isopropyl) Ether (398-38-32-9)								
138. Bis (2-Ethylhexyl) Phthalate (117-81-7)								
148. 4-Bromo-phenyl Phenyl Ether (101-85-3)								
158. Butyl Benzyl Phthalate (88-68-7)								
168. 2-Chloro-naphthalene (91-08-7)								
178. 4-Chloro-phenyl Phenyl Ether (1008-72-3)								
18P. Chrysenes (218-01-6)								
188. Dibenz (a,h) Anthracene (83-70-3)								
208. 1,2-Dichloro-benzene (95-50-1)								
218. 1,3-Dichloro-benzene (841-78-1)								

CONTINUED FROM PAGE V-6

1. POLLUTANT AND CAS NUMBER (if available)	2. MAX. 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		
	MAX. CONC. (ppm)	MAX. DAILY VALUE (lb)	MAXIMUM 30 DAY VALUE (if available) (1) CONCENTRATION (2) MASS	LONG TERM AVG. VALUE (if available) (1) CONCENTRATION (2) MASS	% CONCEN. TRATION	lb MASS	AVERAGE VALUE (1) CONCEN. TRATION (2) MASS	LONG TERM AVERAGE VALUE (1) CONCEN. TRATION (2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)									
22B. 1,4-Dichlorobenzene (106-46-7)	X								
23B. 3,3'-Dichlorobenzidine (91-94-1)	X								
24B. Diethyl Phthalate (84-66-2)	X								
25B. Dimethyl Phthalate (131-11-3)	X								
26B. Di-N-Butyl Phthalate (84-74-2)	X								
27B. 2,4-Dinitrotoluene (121-14-2)	X								
28B. 2,6-Dinitrotoluene (806-20-2)	X								
29B. Di-N-Octyl Phthalate (117-84-0)	X								
30B. 1,2-Diphenylhydrazine (as Ar. benzene) (122-66-7)	X								
31B. Fluoranthene (206-44-0)	X								
32B. Fluorene (86-73-7)	X								
33B. Hexachlorobenzene (118-71-1)	X								
34B. Hexachlorobutadiene (87-68-3)	X								
35B. Hexachlorocyclopentadiene (77-47-4)	X								
36B. Hexachloroethane (67-72-1)	X								
37B. Indeno (1,2,3-cd) Pyrene (193-38-5)	X								
38B. Isophorane (78-59-1)	X								
39B. Naphthalene (91-20-3)	X								
40B. Nitrobenzene (98-96-3)	X								
41B. N-Nitrosodimethylamine (62-75-9)	X								
42B. N-Nitrosodimethylamine (62-75-9)	X								

CONTINUED FROM	FRONT		3. EFFLUENT		4. UNITS		5. INT		6. NO OF ANAL YSES
	MARK 'A'	MARK 'B'	6. MAXIMUM DAILY VALUE (i) concentration (ii) mass	7. MAXIMUM 30 DAY VALUE (i) concentration (ii) mass	8. CONCENTRATION	9. MASS	10. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	11. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	
1. POLLUTANT AND CAS NUMBER (if available)	2. USE OF FACILITY (if available)	3. USE OF FACILITY (if available)	4. MAXIMUM DAILY VALUE (i) concentration (ii) mass	5. MAXIMUM 30 DAY VALUE (i) concentration (ii) mass	6. CONCENTRATION	7. MASS	8. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	9. LONG TERM AVERAGE VALUE (i) concentration (ii) mass	10. NO OF ANAL YSES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)									
43B. N-Nitro-2,2-diphenylamine (88-30-8)		X							
44B. Phenoanthrene (71-01-8)		X							
45B. Pyrene (129-00-0)		X							
46B. 1,2,4-Tri-phenylbenzene (126-82-1)		X							
GC/MS FRACTION - PESTICIDES									
1P. Aldrin (308-00-2)		X							
2P. δ -BHC (319-84-8)		X							
3P. β -BHC (319-86-7)		X							
4P. γ -BHC (58-35-9)		X							
5P. δ -BHC (319-86-8)		X							
6P. Chlordane (87-74-8)		X							
7P. 4,4'-DDE (60-29-3)		X							
8P. 4,4'-DDD (72-85-9)		X							
9P. 4,4'-DOP (72-84-8)		X							
10P. Dieldrin (80-57-1)		X							
11P. α -Endosulfan (118-29-7)		X							
12P. β -Endosulfan (118-29-7)		X							
13P. Endosulfan Sulfate (1031-07-8)		X							
14P. Endrin (72-20-8)		X							
15P. Endrin Aldehyde (7431-93-4)		X							
16P. Heptachlor (78-44-8)		X							

EPA I.D. NUMBER (copy from Item 1 of Form 1) **OUTFALL NUMBER**
NJ0025411 **463B**

CONTINUED FROM PAGE V-8

POLLUTANT AND CAS NUMBER (if available)	E. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
	STATE OR FEDERAL	CONCENTRATION	B. MAXIMUM DAILY VALUE (if available)	C. LONG TERM AVG. VALUE (if available)	A. CONCENTRATION	B. MASS	LONG TERM AVERAGE VALUE (if available)	B. NO. OF ANALYSES
	CONCENTRATION	CONCENTRATION	CONCENTRATION	CONCENTRATION				
MS FRACTION - PESTICIDES (continued)								
P, Heptachlor epoxide (324-87-3)		X						
P, PCB-1242 (3489-21-8)		X						
P, PCB-1254 (1067-69-1)		X						
P, PCB-1221 (1104-26-2)		X						
P, PCB-1232 (1141-18-6)		X						
P, PCB-1248 (1072-29-6)		X						
P, PCB-1260 (1066-62-6)		X						
P, PCB-1018 (2074-11-2)		X						
P, Toxaphene (201-35-2)		X						X

NJ0025411

Perimeter Storm Drain
(non-process)
Farm Approved OMR No. 188-R0173

OUTFALL NO.
464

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

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

I. POLLUTANT	2. EFFLUENT						J. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVERAGE VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
b. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
e. Ammonia (as N)	NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
f. Flow	VALUE 2.001		VALUE NA		VALUE 0.248		*-5	million per day	gallons	VALUE NA		NA
g. Temperature (winter)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		NA
h. Temperature (summer)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		NA
i. pH	MINIMUM NA	MAXIMUM NA	MINIMUM NA	MAXIMUM NA	X		*-4	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

I. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						J. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVERAGE VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromine (24969-67-9)		X							*-4					
b. Chlorine, Total Residual		X							*-4					
c. Color	X								*-4					
d. Fecal Coliform		X							*-4					
e. Fluoride (16004-48-6)		X							*-4					
f. Nitrate-Nitrite (as N)	X								*-4					

1. POLLUTANT AND CAS NO. (if available)	2. MTR		3. EFFLUENT						4. UNITS		5. INTAKE <small>(n/d)</small>			
	MTR NO.	MTR	A. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE <small>(if available)</small>		C. LONG TERM AVERAGE VALUE <small>(if available)</small>		I. NO. OF ANALYSES	B. CONCENTRATION	L. MASS	A. DAILY VALUE		K. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
2. Nitrogen, Total Organic as N	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
1. Oil and Grease	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Phosphorus as P, Total 7723-14-0	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Radioactivity														
1) Alpha, Total		X												
2) Beta, Total		X												
3) Radium, Total		X												
4) Radium 226, Total		X												
Sulfate as SO ₄ 14008-79-8		X												
Sulfide as S		X												
n. Sulfite as SO ₃ 14206-45-3		X												
Surfactants		X												
Aluminum, total 7429-90-5		X												
Barium, total 7440-39-3		X												
Boron, total 7440-42-8		X												
Cobalt, total 7440-48-4		X												
Iron, Total 7439-89-6	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Magnesium, total 7439-96-4	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Molybdenum, total 7439-98-7		X												
Manganese, total 7439-96-5	X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
Tin, Total 7440-31-5		X												
Titanium, total 7440-32-6		X												

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CONTINUED FROM PAGE 3 OF FORM 2 C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	2-a GC/MS FRACTION	2-b NON-PROCESS WASTEWATER	2-c OTHER	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVERAGE VALUE (if available)		D. NO. OF ANALYSES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE		H. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M Arsenic, Total (7440 36 0)			X												
2M Arsenic, Total (7440 36 2)			X												
3M Beryllium, Total (7440 41 7)			X												
4M Cadmium, Total (7440 43 9)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
5M Chromium, Total (7440 47 3)			X												
6M Copper, Total (7550 50 8)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
7M Lead, Total (7439 92 1)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
8M Mercury, Total (7439 97 6)			X												
9M Nickel, Total (7440 02 0)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
10M Selenium, Total (7782 49 2)			X												
11M Silver, Total (7440 22 4)			X												
12M Thallium, Total (7420 28 0)			X												
13M Zinc, Total (7440 66 6)		X		NA	NA	NA	NA	NA	NA	*-4	NA	NA	NA	NA	NA
14M Cyanide, Total (77 12 5)			X												
15M Phenols, Total			X												
DIOXIN															
2,3,7,8 Tetrachlorodibenzo-p-dioxin (178 4 01 6)			X	DESCRIBE RESULTS											

CONTINUED FROM THE FRONT

REPORTING FACILITY NAME	2. MARK 'A'		3. EFFLUENT		4. UNITS		5. INTAKL		
	MARK 'A' WITH AD	MARK 'A' REVERSE SIDE	B. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	D. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	C. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	A. CONCENTRATION	B. MASS	LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	NO. OF ANALYSES
GC/MS DETECTION - VOLATILE COMPOUNDS									
1,1,1-Trichloroethane		X							
1,1,2-Trichloroethane		X							
1,1-Dichloroethane		X							
1,2-Dichloroethane		X							
1,1,1,2-Tetrachloroethane		X							
1,1,2,2-Tetrachloroethane		X							
1,1,1-Trichloroethene		X							
1,1-Dichloroethene		X							
1,2-Dichloroethene		X							
1,1,1-Trichloroethane		X							
1,1,2-Trichloroethane		X							
1,1-Dichloroethane		X							
1,2-Dichloroethane		X							
1,1,1,2-Tetrachloroethane		X							
1,1,2,2-Tetrachloroethane		X							
1,1,1-Trichloroethene		X							
1,1-Dichloroethene		X							
1,2-Dichloroethene		X							
1,1,1-Trichloroethane		X							
1,1,2-Trichloroethane		X							
1,1-Dichloroethane		X							
1,2-Dichloroethane		X							
1,1,1-Trichloroethene		X							
1,1-Dichloroethene		X							
1,2-Dichloroethene		X							

CONTINUE ON PAGE V-5

PAGE V-4

1. POLLUTANT AND CAS NUMBER (// available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)		
	A. TESTING REQUIRED	B. RECEIVED PERCENT	C. RECEIVED AS PERCENT	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (// available)		C. LONG TERM AVRG. VALUE (// available)		D. NO. OF ANALYSES	A. CONCENTRATION	b. MASS	E. LONG TERM AVERAGE VALUE	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)														
22V. Methylene Chloride (75-09-2)			X											
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X											
24V. Tetrachloroethylene (127-18-4)			X											
25V. Toluene (108-88-3)			X											
26V. 1,2-Trans-Dichloroethylene (156-60-8)			X											
27V. 1,1,1-Trichloroethane (71-55-5)			X											
28V. 1,1,2-Trichloroethane (79-00-8)			X											
29V. Trichloroethylene (79-01-6)			X											
30V. Trichlorofluoromethane (75-69-4)			X											
31V. Vinyl Chloride (75-01-4)			X											
GC/MS FRACTION - ACID COMPOUNDS														
1A. 2-Chlorophenol (98-57-8)			X											
2A. 2,4-Dichlorophenol (120-83-2)			X											
3A. 2,4-Dimethylphenol (105-67-9)			X											
4A. 2,6-Dinitro-Cresol (534-52-1)			X											
5A. 2,4-Dinitrophenol (51-28-5)			X											
6A. 2-Nitrophenol (88-75-5)			X											
7A. 4-Nitrophenol (100-02-7)			X											
8A. 2,4,6-Trichloro-Cresol (59-50-7)			X											
9A. Pentachlorophenol (87-86-5)			X											
10A. Phenol (108-95-2)			X											
11A. 2,4,6-Trichlorophenol (88-06-2)			X											

CONTINUED FROM THE FRONT

1. POLLUTANT NUMBER (If available)	2. MARK 'X' (If checked, indicate in which column)	3. EFFLUENT		4. UNITS		5. INTAKE (Optional)	
		A. MAXIMUM DAILY VALUE (If available)	B. MAXIMUM 30 DAY VALUE (If available)	C. LONG TERM (If available) AVERAGE VALUE (i) CONCENTRATION (ii) MASS	D. CONCENTRATION (i) MASS	E. LONG TERM AVERAGE VALUE (i) CONCENTRATION (ii) MASS	F. NO. OF ANALYSES
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS							
1E. Acetophenone (83-32-8)	X						
2E. Acetophenone (208-98-8)	X						
3E. Acetophenone (120-12-7)	X						
4E. Acetophenone (92-87-5)	X						
5E. Benzene (a) Anthracene (201-12-0)	X						
6E. Benzene (b) Pyrene (80-32-8)	X						
7E. 3,4-Benzofluoranthene (208-99-2)	X						
8E. Benzofluoranthene (191-24-3)	X						
9E. Benzofluoranthene (207-06-9)	X						
10E. Bis (2-Chloroethyl) Methane (111-91-1)	X						
11E. Bis (2-Chloroethyl) Ether (111-44-4)	X						
12E. Bis (2-Chloroethyl) Ether (38638-32-6)	X						
13E. Bis (2-Ethylhexyl) Phthalate (117-81-7)	X						
14E. 4-Bromophenyl Phenyl Ether (101-85-3)	X						
15E. Butyl Benzyl Phthalate (88-68-7)	X						
16E. 2-Chloronaphthalene (91-58-7)	X						
17E. 6-Chlorobenzyl Phenyl Ether (7006-72-3)	X						
18E. Chrysene (218-01-9)	X						
19E. Dibenzofluorene (a,b) (2170-31-2)	X						
20E. 1-Chloro-2-naphthol (80-11-1)	X						
21E. 1-Chloro-2-naphthol (80-11-1)	X						

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TREATING EQUIPMENT	B. DISCHARGE POINT	C. RECEIVING BODY OF WATER	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE		H. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
228. 1,4-Dichlorobenzene (106-46-7)			X												
238. 3,3'-Dichlorobenzidine (91-94-1)			X												
248. Diethyl Phthalate (84-66-2)			X												
258. Dimethyl Phthalate (131-11-3)			X												
268. Di-N-Butyl Phthalate (84-74-2)			X												
278. 2,4-Dinitrotoluene (121-14-2)			X												
288. 2,6-Dinitrotoluene (806-20-2)			X												
298. Di-N-Octyl Phthalate (117-84-0)			X												
308. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)			X												
318. Fluoranthene (206-44-0)			X												
328. Fluorene (86-73-7)			X												
338. Hexachlorobenzene (118-71-1)			X												
348. Hexachlorobutadiene (57-68-3)			X												
358. Hexachlorocyclopentadiene (77-47-4)			X												
368. Hexachloroethane (87-72-1)			X												
378. Indeno (1,2,3-cd) Pyrene (193-39-5)			X												
388. Isophorone (78-59-1)			X												
398. Naphthalene (91-20-3)			X												
408. Nitrobenzene (98-05-3)			X												
418. N-Nitrosodimethylamine (62-78-9)			X												
428. N-Nitrosodi-N-Propylamine (821-64-7)			X												

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1. POLLUTANT AND CAS NUMBER (1) (2) (3) (4)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		
	USE	CONC. SENT	8. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	9. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	10. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	11. CONCENTRATION	12. MASS	13. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)									
438. N-Nitrobenzothioylamine (185-30-6)		X							
446. Phthalanitrone (185-01-8)		X							
468. 1,2,4-Trichlorobenzene (120-82-1)		X							
GC/MS FRACTION - PESTICIDES									
1P. Aldrin (300-66-2)		X							
3P. Dieldrin (319-34-8)		X							
3P. DDT (135-45-7)		X							
4P. DDE (185-46-9)		X							
6P. DHC (131-90-8)		X							
6P. Chlorobenzene (108-90-7)		X							
7P. DDE (185-46-9)		X							
8P. DDE (172-85-9)		X							
9P. DDE (172-85-9)		X							
10P. Dieldrin (108-90-7)		X							
11P. DDE (172-85-9)		X							
12P. DDE (172-85-9)		X							
13P. DDE (172-85-9)		X							
14P. DDE (172-85-9)		X							
15P. DDE (172-85-9)		X							
16P. DDE (172-85-9)		X							
17P. DDE (172-85-9)		X							
18P. DDE (172-85-9)		X							
19P. DDE (172-85-9)		X							
20P. DDE (172-85-9)		X							

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EPA I.D. NUMBER (copy from Item 1 of Form 1) NJ0025411
 OUTFALL NUMBER 464

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TESTING REQUIRED	B. SOLUBLE	C. OBSERVED	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-87-3)			X												
18P. PCB-1242 (63469-21-9)			X												
19P. PCB-1254 (11097-89-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-6)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11098-82-6)			X												
24P. PCB-1016 (12674-11-2)			X												
25P. Toxaphene (8001-36-2)			X												

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'A'		3. EFFLUENT		4. UNITS	5. INTAKE (optional)	
	h. No. in vent	g. No. in vent	a. MAXIMUM DAILY VALUE (1) mass concentration	b. MAXIMUM 30 DAY VALUE (1) mass concentration		(i) concn. (1) mass	(j) mass
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)							
22B. 1,4-Dichlorobenzene (106-46-7)							
23B. 3,3'-Dichlorobenzidine (91-94-1)			X				
24B. Diethyl Phthalate (84-66-2)			X				
25B. Dimethyl Phthalate (131-11-3)			X				
26B. Di-N-Butyl Phthalate (84-74-2)			X				
27B. 2,4-Dinitrotoluene (121-14-2)			X				
28B. 2,6-Dinitrotoluene (606-20-2)			X				
29B. Di-N-Octyl Phthalate (117-84-0)			X				
30B. 1,2-O-phenylhydrazine (as Azobenzene) (122-66-7)			X				
31B. Fluoranthene (206-44-0)			X				
32B. Fluorene (86-73-7)			X				
33B. Hexachlorobenzene (118-71-1)			X				
34B. Hexachlorobutadiene (87-68-3)			X				
35B. Hexachlorocyclopentadiene (177-47-4)			X				
36B. Hexachloroethane (67-72-1)			X				
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)			X				
38B. Isophorone (78-59-1)			X				
39B. Naphthalene (91-20-3)			X				
40B. Nitrobenzene (98-95-3)			X				
41B. N-Nitrosodimethylamine (62-75-9)			X				
42B. N-Nitrosodi-N-Propylamine (521-64-7)			X				

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INT		6. NO. OF ANAL. YSES	7. LONG TERM AVERAGE VALUE (i) CONCEN- TRATION (j) MASS	8. NO. OF ANAL. YSES	9. LONG TERM AVERAGE VALUE (i) CONCEN- TRATION (j) MASS	10. (optional)
	USE: 1. ANALYSIS 2. DATA 3. REPORT	USE: 4. ANALYSIS 5. DATA 6. REPORT	a. MAXIMUM DAILY VALUE (i) CONCEN- TRATION (j) MASS	b. MAXIMUM 30 DAY VALUE (i) CONCEN- TRATION (j) MASS	a. CONCEN- TRATION	b. MASS	a. CONCEN- TRATION	b. MASS					
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)													
43B, N-Nitro- diphenylamine (86-30-8)		X											
44B, Phenanthrene (89-01-8)		X											
45B, Pyrene (129-00-0)		X											
46B, 1,2,4,7,8- chlorodibenzodioxin (120-82-1)		X											
GC/MS FRACTION - PESTICIDES													
1P, Atrazin (309-00-2)													
2P, D-DHO (319-84-8)													
3P, D-DHO (319-86-7)													
4P, D-DHO (88-89-9)													
5P, D-DHO (319-86-8)													
6P, Dieldrin (57-74-9)													
7P, D, DDT (60-29-8)													
8P, D, DDE (172-85-8)													
9P, D, DDB (172-84-8)													
10P, Dieldrin (60-29-1)													
11P, D-Endosulfen (119-28-7)													
12P, D-Endosulfen (119-28-7)													
13P, Endosulfen Sulfate (1031-07-2)													
14P, Endosulfen (72-20-6)													
15P, Endosulfen Aldehyde (7421-03-1)													
16P, Endosulfen (7421-03-1)													

EPA I.D. NUMBER (copy from Item 1 of Form 1) **NJ0025411** OUTFALL NUMBER **463A**

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1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TEST METHOD	B. SOLUBLE	C. SOLUBLE	B. MAXIMUM DAILY VALUE		C. MAXIMUM 30 DAY VALUE (if available)		D. LONG TERM AVG. VALUE (if available)		E. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-87-3)			X												
18P. PCB-1242 (63489-21-9)			X												
19P. PCB-1254 (11087-89-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-18-6)			X												
22P. PCB-1246 (12672-29-6)			X												
23P. PCB-1280 (11086-82-6)			X												
24P. PCB-1018 (12674-11-2)			X												
25P. Dieldrin (8001-35-3)															

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

EPA I.D. NUMBER (copy from Item 1 of Form 1)

NJ0025411

Settling Pond
(non-process)

Form Approved OMB No. 158-R0173

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

OUTFALL NO
463B

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
b. Chemical Oxygen Demand (COD)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
c. Total Organic Carbon (TOC)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Total Suspended Solids (TSS)	100	22	30	6.6	NA	NA	*-1	mg/L	Kg	NA	NA	NA
e. Ammonia (as N)	NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
f. Flow	VALUE 58,000		VALUE NA		VALUE NA		*-1	gallons per day		VALUE NA		NA
g. Temperature (winter)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		NA
h. Temperature (summer)	VALUE Ambient		VALUE NA		VALUE Ambient		*-1	°C		VALUE NA		NA
i. pH	MINIMUM 6	MAXIMUM 9	MINIMUM NA	MAXIMUM NA	X		*-1	STANDARD UNITS		X		

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. PRESENT	b. ABSENT	b. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANALYSES	e. CONCENTRATION	f. MASS	g. LONG TERM AVERAGE VALUE		h. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24969-87-9)		X												
b. Chloride - Total Residual		X												
c. Color	X		NA	NA	NA	NA	NA	NA	*-2	NA	NA	NA	NA	NA
d. Fecal Coliform		X												
e. Fluoride (18084-48-8)	X											X		
f. Nitrate-Nitrite (as N)	X											X		

1. POLLUTANT AND CAS NO. (if available)	2. H.W. QUANTITY PERSENT	3. EFFLUENT				4. UNITS		5. INTAKE (10/1)		6. NO. OF ANAL. YRS.
		8. MAXIMUM DAILY VALUE		9. MAXIMUM 30 DAY VALUE (if available)		C. CONCEN- TRATION	D. MASS	AVERAGE VAL.		
		(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
b. Nitrogen, Total Organic (as N)	X	10	2.2	NA	NA	mg/L	kg	NA	NA	NA
c. Oil and Grease	X									
d. Phosphorus (as P), Total (7723-14-0)	X									
J. Radioactivity										
(1) Alpha Total	X									
(2) Beta Total	X									
(3) Neutron Total	X									
(4) Radium 226, Total	X									
k. Sulfate (as SO ₄) (14808-79-8)	X									X
l. Sulfide (as S)	X									
m. Sulfite (as SO ₃) (14288-48-5)	X									
n. Sulfonates	X									
o. Aluminum, Total (7429-90-6)	X									
p. Barium, Total (7440-39-3)	X									
q. Boron, Total (7440-42-8)	X									X
r. Cobalt, Total (7440-48-4)	X									
s. Iron, Total (7439-89-6)	X	1	0.2	NA	NA	mg/L	kg	NA	NA	NA
t. Magnesium, Total (7439-96-4)	X									X
u. Molybdenum, Total (7439-96-4)	X									
v. Manganese, Total (7439-96-4)	X									X
w. Vanadium, Total (7440-31-8)	X									
x. Zinc, Total (7440-33-8)	X									

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463B

CONTINUED FROM PAGE 3 OF FORM 2-C

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (secondary industries, non-process wastewater outfalls, and non-required GC/MS fractions), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TOXIC METALS	B. SILVER	C. CHLORIDE	B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		G. NO. OF ANALYSES	F. CONCENTRATION	H. MASS	E. LONG TERM AVERAGE VALUE		I. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M Antimony, Total (7440 36 0)			X												
2M Arsenic, Total (7440 38 2)		X											X		
3M Beryllium, Total (7440 41 7)			X												
4M Cadmium, Total (7440 43 9)		X											X		
5M Chromium, Total (7440 47 3)		X											X		
6M Copper, Total (7550 50 8)		X		0.2	0.04	NA	NA	NA	NA	*-1	mg/L	Kg	NA	NA	NA
7M Lead, Total (7439 92 1)		X											X		
8M Mercury, Total (7439 97 6)		X											X		
9M Nickel, Total (7440 02 0)			X												
10M Selenium, Total (7782 49 2)		X											X		
11M Silver, Total (7440 22 4)		X											X		
12M Thallium, Total (7440 28 0)			X												
13M Zinc, Total (7440 66 6)			X												
14M Cyanide, Total (57 12 5)			X												
15M Phenols, Total			X												
DIOXIN															
2,3,7,8 Tetra chlorodibenzo P Dioxin (176-4 01 1)			X	DESCRIBE RESULTS											

1. POLLUTANT NUMBER AND CAS (if available)	2. MARK 'A' (a) (b) (c) (d) (e) (f) (g) (h) (i) (j) (k) (l) (m) (n) (o) (p) (q) (r) (s) (t) (u) (v) (w) (x) (y) (z)	3. EFFLUENT		4. UNITS		5. INT		6. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	7. NO OF ANAL. YSES	
		D. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	E. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	G. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	H. CONCENTRATION	I. MASS	J. CONCENTRATION			K. MASS
GC/MS FRACTION - VOLATILE COMPOUNDS										
1V. Acrolein (107-02-8)										
2V. Acrylonitrile (107-13-1)										
3V. Benzene (71-43-2)										
4V. Bis (Chloromethyl) Ether (542-88-1)										
5V. Bromoform (75-28-2)										
6V. Carbon Tetrachloride (56-23-5)										
7V. Chlorobenzene (108-90-7)										
8V. Chlorodibromomethane (124-48-1)										
9V. Chloroethane (78-00-3)										
10V. 2-Chloroethylvinyl Ether (110-76-8)										
11V. Chloroform (67-66-3)										
12V. Dichlorobromomethane (75-27-4)										
13V. Dichlorodifluoromethane (78-71-8)										
14V. 1,1-Dichloroethane (78-34-3)										
15V. 1,2-Dichloroethane (107-06-2)										
16V. 1,1-Dichloroethylene (78-35-4)										
17V. 1,2-Dichloropropane (78-87-5)										
18V. 1,3-Dichloropropane (542-78-6)										
19V. Ethylbenzene (100-41-4)										
20V. Methyl Bromide (74-83-9)										
21V. Methyl Chloride (74-87-3)										

CONTINUED FROM

GE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	A. TEST INCL. OR EXCL. QUANT.	B. ORIGIN OF POLLUTANT	C. SOURCE OF POLLUTANT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	B. CONCENTRATION	D. MASS	C. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)			X												
23V. 1,1,2,2-Tetrachloroethane (79-34-5)			X												
24V. Tetrachloroethylene (127-18-4)			X												
25V. Toluene (108-88-3)			X												
26V. 1,2-Trans-Dichloroethylene (156-60-5)			X												
27V. 1,1,1-Trichloroethane (71-55-6)			X												
28V. 1,1,2-Trichloroethane (79-00-5)			X												
29V. Trichloroethylene (79-01-6)			X												
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)			X												
GC/MS FRACTION - ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)			X												
2A. 2,4-Dichlorophenol (120-83-2)			X												
3A. 2,4-Dimethylphenol (106-67-9)			X												
4A. 4,6-Dinitro-O-Cresol (534-52-1)			X												
5A. 2,4-Dinitrophenol (51-28-5)			X												
6A. 2-Nitrophenol (88-75-5)			X												
7A. 4-Nitrophenol (100-02-7)			X												
8A. P-Chloro-M-Cresol (59-50-7)			X												
9A. Pentachlorophenol (87-66-5)			X												
10A. Phenol (108-95-2)			X												
11A. 2,4,6-Trichlorophenol (88-06-2)			X												

1. POLLUTANT AND CAS NUMBER (if available)	2. SRC 'X'	3. EFFLUENT D. MAXIMUM 30 DAY VALUE (if available)	4. UNITS		5. INT. AVERAGE VALUE		6. NO. OF ANAL. YSES
			8. MAXIMUM DAILY VALUE (if available)	9. CONCENTRATION	10. MASS	11. CONCEN. LIMITATION	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS							
18. Acenaphthene (83-32-9)		X					
28. Acenaphthylene (208-96-6)		X					
38. Anthracene (120-12-7)		X					
48. Benzidine (92-87-5)		X					
58. Benzo (a) Anthracene (86-55-3)		X					
68. Benzo (a) Pyrene (80-32-8)		X					
78. 3,4-Benzo-Fluoranthene (206-99-2)		X					
88. Benzo (ghi) Perylene (191-24-2)		X					
98. Benzo (h) Fluoranthene (207-08-9)		X					
108. Bis (2-Chloroethyl) Methane (111-91-1)		X					
118. Bis (2-Chloroethyl) Ether (111-46-4)		X					
128. Bis (2-Chloroisopropyl) Ether (39638-32-9)		X					
138. Bis (2-Ethylhexyl) Phthalate (117-81-7)		X					
148. 4-Bromo-phenyl Phenyl Ether (101-68-3)		X					
158. Butyl Benzyl Phthalate (85-98-7)		X					
168. 2-Chloro-naphthalene (91-68-7)		X					
178. 4-Chloro-phenyl Phenyl Ether (7006-72-3)		X					
188. Chrysenes (215-01-9)		X					
198. Dibenzo (a,h) Anthracene (53-70-3)		X					
208. 1,2-Dichlorobenzenes (86-90-1)		X					
218. 1,3-Dichlorobenzenes (85-1-73-1)		X					