



## DEPARTMENT OF ENVIRONMENTAL PROTECTION

CN 402

Trenton, N.J. 08625

## PERMIT



The New Jersey Department of Environmental Protection grants this permit in accordance with your application, attachments accompanying same application, and applicable laws and regulations. This permit is also subject to the further conditions and stipulations enumerated in the supporting documents which are agreed to by the permittee upon acceptance of the permit.

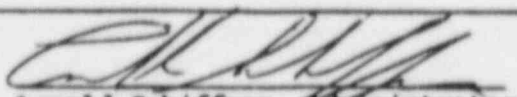
Permit No. NJ0025411	Issuance Date August 8, 1985	Effective Date October 1, 1985	Expiration Date September 30, 1990
Name and Address of Applicant Public Service Electric and Gas Company 80 Park Plaza, Mail Code 10C Newark, New Jersey 07101	Location of Activity/Facility Hope Creek Generating Station Foot of Buttonwood Road Artificial Island, Lower Alloways Creek Twp., Salem County, N.J.	Name and Address of Owner Same as Applicant	
Issuing Division Water Resources	Type of Permit NJPDES-DSW	Statute(s) N.J.S.A. 58:10A-1 et seq.	Application No. NJ0025411

This permit grants permission to:

discharge cooling tower blowdown, stormwater runoff and treated process wastewater to Zone 5 of the Delaware River, in accordance with effluent conditions, monitoring requirements and other conditions set forth in Parts I, II, III and IV hereof.

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Approved by the Department of Environmental Protection  
By Authority of:  
John W. Gaston Jr., P.E.  
Director  
Division of Water Resources

  
Arnold Schiffman, Administrator  
Water Quality Management

8/8/85  
DATE

\* The word permit means "approval, certification, registration, etc."

(GENERAL CONDITIONS ARE ON THE REVERSE SIDE.)

CHECKLIST OF PARTS AND MODULES COMPRISING THIS NJPDES PERMIT

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1. Cover Page
2. Checklist
3. Part I (General Conditions for All NJPDES Discharge Permits)
4. Part II - Additional General Conditions for the types of NJPDES Permits checked as follows:

☐ Part II - A (Municipal/Sanitary)  
☒ Part II - B/C (Industrial/Commercial/Thermal)  
☐ Part II - L (SIU)  
☐ Part II - IMWF (Industrial Waste Management Facility)  
☐ Part II - DGM Specify type(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. Part III - Effluent Limitations and Monitoring Requirements

☐ Part III - A  
☒ Part III - B/C  
☐ Part III - L  
☐ Part III - DGM Specify type(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Part IV - Special Conditions

☐ Part IV - A  
☒ Part IV - B/C  
☐ Part IV - L  
☐ Part IV - IMWF  
☐ Part IV - DGM Specify type(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

GENERAL CONDITIONS FOR ALL NJPDES DISCHARGE PERMITS

1. Duty to Comply

- A. The permittee shall comply with all conditions of this New Jersey Pollutant Discharge Elimination System (NJPDES) permit. No pollutant shall be discharged more frequently than authorized or at a level in excess of that which is authorized by the permit. The discharge of any pollutant not specifically authorized in the NJPDES permit or listed and quantified in the NJPDES application shall constitute a violation of the permit, unless the permittee can prove by clear and convincing evidence that the discharge of the unauthorized pollutant did not result from any of the permittee's activities which contribute to the generation of its wastewaters. Any permit noncompliance constitutes a violation of the New Jersey Water Pollution Control Act (N.J.S.A. 58:10A-1 et seq.; hereinafter referred to as the State Act) or other authority of the NJPDES regulations (N.J.A.C. 7:14A-1 et seq.) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- B. A permittee shall not achieve any effluent concentration by dilution. Nor shall a permittee increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality standards.
- C. The permittee shall comply with applicable effluent standards or prohibitions established under Section 307 (a) of the "Federal Water Pollution Control Act" (PL 92-500 et seq.; hereinafter referred to as the Federal Act) and Section 4 of the State Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- D. The State Act provides that any person who violates a permit condition implementing the State Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing the State Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both.
- E. The permittee is required to comply with all other applicable federal, state and local rules, regulations, or ordinances. The issuance of this permit shall not be considered as a waiver of any other requirements.

2. Permit Expiration

This permit and the authorization to discharge shall expire at midnight on the expiration date of the permit. The permittee shall not discharge after the above date of expiration of the permit.

- A. Duty to Reapply. If the permittee wishes to continue an activity regulated by a NJPDES permit after the expiration date of the permit, the permittee shall apply for and obtain a new permit. (If the activity is to be continued, the permittee shall complete, sign, and submit such information, forms, and fees as are required by the Department no later than 180 days before the expiration date.) The permittee shall follow the requirements stated in paragraph 12.A. when signing any application.

B. Continuation of Expiring Permits

- (1) The conditions of an expired permit are continued in force pursuant to the "Administrative Procedure Act," N.J.S.A. 52:14B-11, until the effective date of a new permit if:
  - a. The permittee has submitted a timely and complete application for renewal as provided in Sections 2.1 and (3.2 DSW) (4.4 IWWF) (5.8 UIC) and Subchapter 10 of the NJPDES Regulations; and
  - b. The Department through no fault of the permittee, does not issue a new permit with an effective date under Section 8.6 of the NJPDES Regulations on or before the expiration date of the previous permit (e.g., when issuance is impracticable due to time or resource constraints).
- (2) Permits continued under this section remain fully effective and enforceable.
- (3) Enforcement. When the permittee is not in compliance with the conditions of the expiring or expired permit the Department may choose to do any or all of the following:
  - a. Initiate enforcement action based upon the permit which has been continued;
  - b. Issue a notice of intent to deny the new permit under Section 8.1 of the NJPDES Regulations. If the permit is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operating without a permit;
  - c. Issue a new permit under Subchapters 7 and 8 of the NJPDES Regulations with appropriate conditions; or
  - d. Take other actions authorized by the NJPDES Regulations or the State Act.

3. Duty to Halt or Reduce Activity

- A. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- B. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored to its permitted limits or an alternative method of treatment is provided. This requirement applies, for example, when the primary source of power of the treatment facility fails or is reduced or lost.

4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit, including but not limited to accelerated and/or additional types of monitoring, temporary repairs or other mitigating measures.

5. Proper Operation, Maintenance and Licensing

- A. The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment works, facilities, and systems of treatment and control (and related appurtenances) for collection and treatment which are installed or used by the permittee for



water pollution control and abatement to achieve compliance with the terms and conditions of the permit. Proper operation and maintenance includes but is not limited to effective performance based on designed facility removals, adequate funding, effective management, adequate operator staffing and training and adequate laboratory and process controls including appropriate quality assurance procedures as described in 40 CFR Part 136 and applicable State Law and regulations. All permittees who operate a treatment works, except for sanitary landfills and land application of sludge or septage, must satisfy the licensing requirements of the "Licensing of Operators of Wastewater and Water Systems" N.J.S.A. 58:11-64 et seq. or other applicable law. This paragraph requires the operation of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit or where required by applicable law or regulation.

- B. Facilities Operation and Operator Certification. The operation of any treatment works shall be under the supervision of an operator on the first day of operation of the treatment works and continually thereafter in accordance with paragraph 5.A above. The operator shall meet the requirements of the Department of Environmental Protection of the State of New Jersey pursuant to the provisions of N.J.S.A. 58:11-64 et seq. and amendments thereto. The name of the proposed operator shall be submitted to this Department in order that his qualifications may be determined prior to initiating operation of the proposed treatment works.

6. Permit Actions

- A. This permit may be modified, suspended, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- B. Causes for modification, revocation and reissuance, and suspension are set forth in N.J.A.C. 7:14A-2.12 et seq.
- C. The following are causes for terminating or modifying a permit during its term, or for denying a permit renewal application:
- (1) Noncompliance by the permittee with any condition of the permit;
  - (2) Failure to pay applicable fees (N.J.A.C. 7:14A-1.8), including the annual NJPDES permit fee which has been assessed by the New Jersey Department of Environmental Protection (NJDEP, hereinafter referred to as the Department);
  - (3) The permittee's failure in the application or during the permit issuance process of a National Pollutant Discharge Elimination System (NPDES), Discharge Allocation Certificate (DAC), NJPDES, Treatment Works Approval (TWA) or Construct and Operate permit to disclose fully all relevant facts, or the permittee's misrepresentation of any permit condition;
  - (4) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
  - (5) When there is a change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit (for example, plant closure or termination of discharge by connection to a Domestic Treatment Works (DTW));
  - (6) The nonconformance of the discharge with any applicable facility, basin or areawide plans;

- (7) If such permit is inconsistent with any duly promulgated effluent limitation, permit, regulation, statute, or other applicable state or federal law; or
- (8) If a toxic effluent standard or prohibition is established pursuant to New Jersey Water Pollution Control Act N.J.S.A. 58:10A-1 et seq. or the regulations adopted pursuant to it, for a toxic pollutant which is present in the discharge, and such is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified of the revision or modification and date of required compliance.

#### Property Rights, Liability, and Other Laws

- A. This permit does not convey and property rights of any sort or any exclusive privileges.
- B. Nothing in this permit shall be deemed to preclude the institution of any legal action nor relieve the permittee from any responsibilities or penalties to which the permittee is or may be subject to under any federal, state or local law or regulation.
- C. Nothing in this permit shall be construed to exempt the permittee from complying with the rules, regulations, policies, and/or laws lodged in any agency or subdivision in this State having legal jurisdiction.

#### 8. Duty to Provide Information

- A. The permittee shall furnish to the Director, Division of Water Resources, NJDEP, (hereinafter referred to as the Director), within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, suspending, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit.
- B. Where the permittee becomes aware that he has failed to submit any relevant facts in a permit application, or has submitted incorrect information in a permit application or in any report to the Director, the permittee shall promptly submit such facts or information.

#### 9. Inspection and Entry

- A. The permittee shall allow the Regional Administrator of the United States Environmental Protection Agency (USEPA), the Department, or any authorized representative(s), upon the presentation of credentials and other documents as may be required by law, to:
  - (1) Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept, for purposes of inspection, sampling, copying or photographing. Photography shall be allowed only as related to the discharge;
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - (3) Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
  - (4) Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the State Act, any substances or parameters at any location. This shall include, but not be limited to, the drilling or installation of monitoring wells for

the purpose of obtaining samples of ground water, soil and vegetation and measuring ground water elevations.

- B. Any refusal by the permittee, facility land owner(s), facility lessee(s), their agents, or any other person(s) with legal authority, to allow entry to the authorized representatives of the NJDEP and/or USEPA shall constitute grounds for suspension, revocation and/or termination of this permit.
- C. By acceptance of this permit, the permittee hereby agrees, consents and authorizes the representatives of the NJDEP and/or USEPA to present a copy of this permit to any municipal or state police officer having jurisdiction over the premises occupied by the permittee in order to have said officer effectuate compliance with the right of entry, should the permittee at any time refuse to allow entry to said inspectors.
- D. By acceptance of this permit, the permittee waives all rights to prevent inspections by authorized representatives of the NJDEP and/or USEPA to determine the extent of compliance with any and all conditions of this permit and agrees not to, in any manner, seek to charge said representatives with the civil or criminal act of trespass when they enter the premises occupied by the permittee in accordance with the provisions of this authorization as set forth hereinabove.

10. Ground Water Monitoring Wells

The permittee shall install and maintain ground water monitoring wells if required by this permit at locations and according to specifications provided by the Department. All permit required monitoring wells shall be installed within 30 days of the Effective Date of the Permit. The monitoring wells shall provide turbidity-free water at a minimum rate of two gallons per minute or what the formation will yield with a properly installed and developed ground water monitoring well.

When a monitoring well cannot be used for the purpose of sample collection or ground water level measurements, the permittee shall replace the well at his own expense within 30 days of the missed sampling and/or measurement date. Said unuseable wells shall be sealed, also at the permittee's own expense, in accordance with Department well sealing specifications within the same 30 day period in which the well is replaced. Monitoring wells as required in this permit shall be considered as a monitoring device, which are required to be maintained under the provisions of the New Jersey Water Pollution Control Act N.J.S.A. 58:10A-10(f).

All monitoring wells must be installed by a New Jersey licensed well driller. The elevation to the nearest hundredth of a foot of the top of each well casing shall be established by a New Jersey licensed land surveyor within 30 days of the installation of the monitoring wells. The elevation established shall be in relation to the New Jersey geodetic control datum. Ground water monitoring wells and all point source discharges to ground water shall be located by horizontal control (latitude and longitude) using third order work, class II specification and by vertical control (elevation) using third order work. Within 30 days of the installation date of the monitor well, the permittee shall submit to the Department completed "Ground Water Monitoring Well Certifications - Forms A and B for each well required to be sampled by the permit. Within 60 days of the Effective Date of the Permit, the permittee shall submit to the Department a plot plan of the facility showing the location of all discharges and the ground water monitoring well locations. The scale of the plot plan shall be at least one inch equals fifty (50) feet.

Each ground water monitoring well casing shall have permanently affixed to it a monitoring well number to be assigned by the Department, elevation of the top of the well casing, elevation of the top of the well casing above the ground level and latitude and longitude of the monitoring well.

## 11. Monitoring and Records

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- B. The State Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of no more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. This is specifically intended to include, but not be limited to, ground water monitoring wells and lysimeters.
- C. The applicant shall perform all analyses in accordance with the analytical test procedures approved under 40 CFR Part 136. Where no approved test procedure is available, the applicant must indicate a suitable analytical procedure and must provide the Department with literature references or a detailed description of the procedure. The Department must approve the test procedure before it is used. The laboratory performing the analyses for compliance with this permit must be approved and/or certified by the Department for the analysis of those specific parameters. Information concerning laboratory approval and/or certification may be obtained from:

New Jersey Department of Environmental Protection  
Office of Quality Assurance  
CN 409  
Trenton, New Jersey 08625  
(609) 292-3950

- D. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.
- E. Records of monitoring information shall include:
  - (1) The date, exact place, and time of sampling or measurements;
  - (2) The individual(s) who performed the sampling or measurements;
  - (3) The date(s) analyses were performed;
  - (4) The individual(s) who performed the analyses;
  - (5) The analytical techniques or methods used; and
  - (6) The results of such analyses.
- F. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) and/or on the Department's Monitoring Report Form (MRF); or, where these forms do not apply, in another format approved by the Department.

- G. If the permittee monitors any pollutant more frequently than required by the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR, MRF, or other approved format.
- H. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

I. Discharge Monitoring Reports

- (1) Monitoring results shall be summarized and reported on the appropriate Monitoring Report Forms following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the following address:

Water Quality Management  
Division of Water Resources  
CN 029  
Trenton, New Jersey 08625  
ATTN: Monitoring Reports

- (2) If a contract laboratory is utilized, the permittee shall submit the name and address of the laboratory and the parameters analyzed at the time it submits its monitoring reports (See Section 11.E. above). Any change in the contract laboratory being used or the parameters analyzed shall be reported prior to or together with the monitoring report covering the period during which the change was made.

- J. Monitoring Reports. Monitoring results shall be reported at the intervals and starting date specified elsewhere in this permit.
- K. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

12. Signatory Requirement

- A. Signature Requirements. All permit applications, except those submitted for Class II wells for a UIC-discharge (see paragraph B) shall be signed as follows:

- (1) For a corporation, by a principal executive officer of at least the level of vice president;
- (2) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal or other public agency, by either a principal executive officer or ranking elected official.

- B. Reports. All reports required by permits, other information requested by the Department and all permit applications submitted for Class II wells under N.J.A.C. 7:14A-5.8 shall be signed by a person described in paragraph A of this section or by a duly authorized representative only if:

- (1) The authorization is made in writing by a person described in paragraph A of this section;



(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as a position of plant manager, operator of a well or well field, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Department.

C. Changes to Authorization. If an authorization under paragraph B of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B of this section shall be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification (N.J.A.C. 7:14A-2.4(d)). Any person signing any document under paragraph A or B of this section shall make the following certification: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted 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."

E. False Statements. Any person who knowingly makes a false statement, representation, or certification in any application, record, or other document filed or required to be maintained under the State Act shall upon conviction, be subject to a fine of not more than \$10,000.00 or by imprisonment for not more than 6 months or by both.

### 13. Reporting Changes and Violations

A. Planned Changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. The permittee shall comply with N.J.A.C. 7:14A-12.1 et seq. which requires approval for building, installing, modifying, or operating treatment works. (NOTE: Sewer Extensions require such an approval. A connection of a single building through which less than 2000 gpd flows by gravity through a single lateral is exempt from the requirement to obtain the approval of this Department.). Construction of a sewer extension without this Department's approval will be a violation of this permit.

B. Anticipated Noncompliance. The permittee shall give reasonable advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

### 14. Reporting Noncompliance

A. The permittee shall report any noncompliance which may endanger health or the environment. The permittee shall provide the Department with the following information:

(1) A description of the discharge;

(2) Steps being taken to determine the cause of noncompliance;

(3) Steps being taken to reduce and eliminate the noncomplying discharge;

(4) The period of noncompliance, including exact dates and times. If the noncompliance has not been corrected, the anticipated time when the discharge will return to compliance;



- (5) The cause of the noncompliance; and
  - (6) Steps being taken to reduce, eliminate, and prevent reoccurrence of the noncomplying discharge.
- B. The permittee shall orally provide the information in paragraphs A.(1) through (3) to the DEP Hotline (609) 292-7172 within 2 hours from the time the permittee becomes aware of the circumstances.
- C. The permittee shall orally provide the information in paragraphs A.(4) through (5) to the DEP Hotline within 24 hours of the time the permittee becomes aware of the circumstances.
- D. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain the information in A.(1) through (6).
- E. Other Noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs 11.J, 11.K, 13.A, and 14.A through D at the time monitoring reports are submitted. The reports shall contain the information required in the written submission listed in paragraph 14.D.
- F. The following shall be reported to the Department in accordance with paragraphs 14.A through D:
- (1) In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Federal Act or under Section 6 of the State Act the information required by paragraphs 14.A(1) through (3) regarding a violation of such standard shall be provided to the Department within 2 hours from the time the permittee becomes aware of the circumstances. The information required by paragraphs 14.A(4) through (6) shall be provided to the Department within 24 hours from the time the permittee becomes aware of the circumstances. Where the information is provided orally, a written submission covering these points must be provided within five working days of the time the permittee becomes aware of the circumstances covered by this paragraph.
  - (2) In the case of other discharges which could constitute a threat to human health, welfare, or the environment, including but not limited to, discharge of pollutants designated under Section 311 of the Federal Act, under Section 6 of the State Act, under the "Spill Compensation and Control Act", N.J.S.A. 58:10-23.11 et seq., or under the "Safe Drinking Water Act", N.J.S.A. 58:12A-1 et seq., the information required by paragraph 14.A(1) through (3) shall be provided to the Department within 2 hours from the time the permittee becomes aware of the circumstances. The information required by paragraphs 14.A(4) through (6) shall be provided to the Department within 24 hours from the time the permittee becomes aware of the circumstances. Where the information is provided orally, a written submission covering these points must be provided within five working days of the time the permittee becomes aware of the circumstances covered by this paragraph.
  - (3) The information required in paragraphs 14.A(1) through (3) shall be provided to the Department within 2 hours where a discharge described under paragraphs 14.F(1) or (2) is located upstream of a potable water intake or well field. The information required by paragraphs 14.A(4) through (6) shall be provided to the Department within 24 hours. If this information is provided orally, a written submission covering these points must be provided within five days of the time the permittee becomes aware of the discharge.
  - (4) Any bypass which violates any effluent limitations in the permit shall be reported within 24 hours unless paragraphs 14.F(1) through (3) are applicable. (See Section 15.)

- (5) Any upset which violates any effluent limitation in the permit shall be reported within 24 hours unless paragraphs 14.F(1) through (3) are applicable. (See Section 16.)
- (6) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit shall be reported within 24 hours unless paragraphs 14.F(1) through (3) are applicable (See N.J.A.C. 7:27A-3.13(a)7.).

15. Bypass

- A. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs B. and C. of this section.
- B. Notice
  - (1) Anticipated Bypass. If the permittee knows in advance of the need for a bypass, he shall submit prior notice, if possible, at least thirty (30) days before the date of the bypass.
  - (2) Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph 14.F.(4).
- C. Prohibition of Bypass
  - (1) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass unless:
    - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
    - c. The permittee submitted notices as required under paragraph B of this section.
  - (2) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph C.(1) of this section.

16. Upset

- A. Effect of An Upset. An upset may constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph B. of this section are met. Where no determination was made during administrative review of claims that noncompliance was caused by upset, and there has been no Departmental action for noncompliance, the lack of such determination is final administrative action subject to judicial review.
- B. Conditions Necessary for A Demonstration of Upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the permittee can identify the specific cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated;
- (3) The permittee submitted notice of the upset as required in paragraph 14.F.(5); and
- (4) The permittee complied with any remedial measures required under Section 4 above.

C. Burden of Proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

17. Emergency Plan (DSW and DGW permits only)

A. The permittee shall develop, submit, and implement an Emergency Plan report prepared in accordance with N.J.A.C. 7:14A-3.12(b) unless exempted pursuant to N.J.A.C. 7:14A-3.12(e). If not previously submitted to and approved by NJDEP, the Emergency Plan (or a request for exemption) must be submitted within six (6) months of the effective date of the permit unless otherwise required by N.J.A.C. 7:14A-3.12(a).

B. Liability

- (1) Submission of an Emergency Plan pursuant to this section shall not exempt a permittee from liability for violations arising from an emergency situation. A permittee shall take all necessary actions to mitigate the damage to the waters of the State arising from an emergency situation. Such actions shall not be limited by the emergency operating plan and the manual of procedures.
- (2) Exemption from development of an Emergency Plan under this section does not exempt the permittee from liability for violations arising from an emergency situation. Such permittee shall take all necessary actions to mitigate the damage to the waters of the State arising from an emergency situation.

C. Violations

Failure to submit an emergency plan in compliance with paragraph A. of this section and failure to implement the emergency plan shall each constitute a violation of this permit.

18. Residuals Management

A. Collected grit and screenings, scums, sand bed sands, slurries, and sludges, and all other solids from the treatment process shall be disposed of in such a manner as to prevent such materials from entering the ground and/or surface waters of the state except in accordance with a NJPDES permit. If for any reason such materials are placed in the water or on the lands where they may cause pollutants to enter the ground and/or surface waters of the State, the following information shall be reported to the Division of Water Resources Enforcement Element together with the monitoring data required in Part I, Section 11.1.:

- (1) Dates of occurrence;
- (2) A description of the noncomplying discharge (nature and volume);
- (3) Cause of noncompliance;
- (4) Steps taken to reduce and eliminate the noncomplying discharge; and

(5) Steps taken to prevent recurrence of the condition of noncompliance.

- B. The permittee shall not be permitted to store sludge on-site beyond the capacity of the structural treatment and storage components of the treatment facility, except in accordance with a NJPDES Emergency On-site storage Permit. Nor shall the permittee be permitted to store sludge on-site in any manner which is not in accordance with Solid Waste Management Rules, N.J.A.C. 7:26-1 et seq. Any violations must be reported by the permittee to the Division of Water Resources Enforcement Element within 24 hours.
- C. The permittee shall comply with the Sludge Quality Assurance Regulations (N.J.A.C. 7:14-4.1 et seq.). Where quality information is required by these regulations analyses must reflect the quality of the final sludge product of which the permittee must dispose.
- D. The permittee shall dispose of sludge from this facility in compliance with the New Jersey Solid Waste Management Act N.J.S.A. 13:1E-1 et seq., which requires conformance with Statewide and District Sludge Management Plans, and prohibits the disposal of municipal sewage sludge in landfills. The permittee shall also comply with all applicable rules and regulations promulgated pursuant to the Federal Resource Conservation and Recovery Act governing the treatment, storage and disposal of hazardous waste.
- E. The permittee shall at all times have on file with the Department proof of proper disposal at a facility duly licensed and permitted by the State to dispose of sludge. To satisfy this requirement the permittee shall submit proof of ownership or contractual arrangement with a permitted facility for the composting, land application, thermal reduction, or other approved method of sludge disposal.

Where such permitted sludge disposal does not extend the full term of this permit, the permittee shall submit similar proof of new permitted disposal arrangements which shall become effective no later than the expiration date of previous arrangements. All such proofs of disposal site must be submitted to the Bureau of Permits Administration in duplicate to:

Chief  
Bureau of Permits Administration  
CN-029  
Trenton, N.J. 08625  
ATTN: Sludge Disposal Site Proof

- F. By issuance of this permit the Department hereby gives the permittee notice that the permittee is bound by the New Jersey Pollutant Discharge Elimination System regulations regarding proper sludge disposal (Section 25 (a)(13)).

- G. The permittee shall comply with the Rules and Regulations for the Statewide Management of Septage Disposal (N.J.A.C. 7:14-5.1 et seq.).
- H. The permittee shall conform with the requirements under Section 405 of the Federal Act governing the disposal of sewage sludge from publicly owned treatment works and with Sections 4 and 6 of the State Act.

19. Discharge Permitted

The permittee shall discharge to surface waters, land or ground waters of the State, directly or indirectly, only as authorized herein and consistent with the terms and conditions of this permit.

20. Operation Restrictions

The operation of a waste treatment or disposal facility shall at no time create: (1) a direct discharge to surface waters of the State, except as authorized by NJDEP; (2) a persistent standing or ponded condition for water or waste on the permittee's property except as specifically authorized by this permit, or (3) any standing or ponded condition for water or waste on adjacent properties unless these activities are specifically included within the permit.

21. Oil and Hazardous Substance Liability

The imposition of responsibilities upon, or the institution of any legal action against the permittee under Section 311 of the Federal Act shall be in conformance with regulations promulgated pursuant to Section 311 of the Federal Act governing the applicability of Section 311 to discharges from facilities with NPDES permits.

22. Reopener Clause for Toxic Effluent Limitations

Notwithstanding any other condition of this permit, if any applicable toxic effluent standards, limitation or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Federal Clean Water Act or Sections 4 or 6 of the State Act for a toxic pollutant and that effluent standard, limitation, or prohibition is more stringent than any limitation on the pollutant in the permit (or controls a pollutant not limited in the permit), this permit shall be promptly modified or revoked and reissued to conform to that effluent standard, limitation or prohibition.

23. Availability of Information

- A. NJPDES permits, effluent data, and information required by NJPDES application forms provided by the Regional Administrator or Director (including information submitted on the forms themselves



and any attachments used to supply information required by the forms) shall be available for public inspection at the offices of the Director.

- B. In addition to the information set forth in paragraph A., any other information submitted to EPA and/or the Department in accordance with the conditions of this permit shall be made available to the public without further notice unless a claim of business confidentiality is asserted at the time of submission in accordance with the procedures in 40 CFR Part 2 (Public Information) and/or Subchapter 11 of the "Regulations Concerning the New Jersey Pollutant Discharge Elimination System."
- C. If a claim of confidentiality is made for information other than that enumerated in paragraph A., the information shall be treated by the Department in accordance with the procedures in N.J.A.C. 7:14A-11.1 et seq. Only information determined to be confidential under those procedures shall not be made available by NJDEP for public inspection.

#### 4. Effective Date of Permit

- A. This permit shall become effective in its entirety on the date indicated (Effective Date) on the first page of this permit unless a request for an adjudicatory hearing is granted pursuant to the provisions of N.J.A.C. 7:14A-8.11 et seq.
- B. For purposes of judicial review, final agency action on a permit does not occur unless and until a party has exhausted its administrative remedies under N.J.A.C. 7:14A-6.9 et seq. Any party which neglects or fails to seek such review thereby waives its opportunity to exhaust available agency remedies.

#### 25. Transfer of Permit

- A. This permit is not transferable to any person except after notice to the Department. The Department may require modification, revocation, or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the appropriate Act. (See N.J.A.C. 7:14A-2.12; in some cases, modification or revocation and reissuance is mandatory).
- B. Transfer by Modification. Except as provided in paragraph (C) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under Section 2.12(c)(1).ii.) or a minor modification made (under Section 2.14(a)4. of the NJPDES Regulations), to identify the new permittee and incorporate such other requirements as may be necessary under the State and Federal Acts.
- C. Automatic Transfers. As an alternative to transfers under paragraph (B) of this section, any NJPDES permit, except a UIC permit for a well injecting hazardous waste, may be automatically transferred to a new permittee if:

(1) The current permittee notified the Department in writing by certified mail of the proposed transfer as follows:

- a. Where production levels, products produced, rates of discharge, and wastewater characteristics will remain unchanged, the following information shall be submitted at least 90 days prior to a proposed transfer date:

(1) Name and address of current facility;

(2) Name and address of new owners;



- (3) NJPDES permit number;
- (4) Names of the new principal persons responsible;
- (5) Names of persons upon whom legal process can be served; and
- (6) A notarized statement signed by the new principal officer stating that he has read the NJPDES permit and agrees to abide by all the conditions of the permit and that the production levels, products produced, rates of discharge, and wastewater characteristics will remain unchanged.

b. Where there will be a change in production levels, products produced, rates of discharge, or wastewater characteristics, the information required in paragraph 25.C(1)(a) above shall be submitted at least 180 days prior to a proposed transfer date.

- (2) The current permittee shall include in the notice of proposed transfer a written agreement between the existing and new permittee which includes a specific date for transfer of permit responsibility, coverage, and liability between the parties. In the case of a UIC permit, the notice shall demonstrate that the financial responsibility requirements of Section 5.10(a)7. of the NJPDES Regulations will be met by the new permittee;
- (3) The Department does not notify the existing permittee and the proposed new permittee, within thirty (30) days of receipt of notice of proposed transfer, of an intent to modify, revoke or revoke and reissue the permit or, for a discharge to surface water (DSW), require a DAC. A modification under this paragraph may also be a minor modification under Section 2.14 of the NJPDES Regulations. If such notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 25.C(2) of this section; and
- (4) Whenever the regulated discharge has ceased prior to the proposed permit transfer, any compliance schedule shall not be automatically reinstated but shall be subject to revision or complete withdrawal if circumstances leading to its imposition have changed.

26. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

27. Stay of Conditions, N.J.A.C. 7:14-6.10

A request for an adjudicatory hearing shall not automatically result in a stay of the conditions of this permit.

28. Definitions

A. Unless otherwise stated, all terms shall be as defined in the "Regulations Concerning the New Jersey Pollutant Discharge Elimination System", N.J.A.C. 7:14A-1 et seq.

- (1) "Aliquot" means a sample of specified volume used to make up a total composite sample.
- (2) "Bypass" means the intentional diversion of wastes from any portion of a treatment facility.

- (3) "Composite" means a combination of individual (or continuously taken) samples (aliquots) of at least 100 milliliters, collected at periodic intervals over the entire discharge day. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For a continuous discharge, a minimum of 24 aliquots (at hourly intervals) shall be collected and combined to constitute a 24-hour composite sample. For intermittent discharges of more than 4 hours duration, aliquots shall be taken at a minimum of 30-minute intervals. For intermittent discharges of less than 4 hours duration, aliquots shall be taken at a minimum of 15-minute intervals.
- (4) "EDP" means Effective Date of Permit.
- (5) "Grab" means an individual sample of at least 100 milliliters collected over a period not exceeding 15 minutes.
- (6) "Monthly" means one day each month (the same day each month) and a normal operating day (e.g., the 2nd Tuesday of each month).
- (7) "Multiple Grab Composite" - means a combination of individual samples (aliquots) collected at a specified frequency over a specified time period. Each aliquot must be collected in a glass vial with septum cap, filled to the top leaving no air bubbles, and iced until delivered for analysis. Each aliquot shall be analyzed individually. The recorded value will be flow proportioned average of the individual analyses for the specific time period.
- (8) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- (9) "Weekly" means every seventh day (the same day each week) and a normal operating day.

29. Annual Permit Fee, N.J.A.C. 7:14A-1.8

The permittee shall pay the annual NJPDES permit fee which has been assessed by the Department.

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ADDITIONAL GENERAL CONDITIONS FOR NJPDES/DSW PERMITS FROM  
INDUSTRIAL/COMMERCIAL AND/OR THERMAL DISCHARGES

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1. The following additional conditions applicable to specified categories of DSW permits in accordance with N.J.A.C. 7:14A-3.11, in addition to those set forth in N.J.A.C. 7:14A-2.5, 3.10 and 3.12, hereby apply to all DSW permits within the categories specified below:

Existing manufacturing, commercial, mining, and silvicultural dischargers and research facilities. In addition to the reporting requirements under Section 2.5(a)12 and Section 3.10 of N.J.A.C. 7:14A-1 et seq. all existing manufacturing, commercial, mining, and silvicultural dischargers and research facilities must notify the Department as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels."

- (1) One hundred micrograms per liter (100 ug/l);
- (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
- (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with N.J.A.C. 7:14A-10.3(a)9. or 10.3(a)12; or
- (4) The level established by the Department in accordance with N.J.A.C. 7:14A-3.13(a)6.

- B. That they (except for research facilities) have begun or expect to begin to use or manufacture an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application under N.J.A.C. 7:14A-3.2 and 10.3(a)11.

2. If the permittee is required by this permit to monitor for Oil and Grease and/or Petroleum Hydrocarbons, samples shall be collected and analyzed in accordance with the Oil and Grease Effluent Limitations, N.J.A.C. 7:14A-14.1 et seq.

3. Submission of Monitoring Reports

Monitoring results for each reporting period shall be summarized and reported on the appropriate Monitoring Report forms and shall be submitted postmarked no later than the 25th day of the month following the completed reporting period.

# 1.A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):461A

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 461A; and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	Minimum	Average	Maximum	Frequency	Sample type
Flow (MGD)	N/A	N/A	N/A	Continuous	N/A
Temperature-Inf °F(°C)	N/A	N/A	N/A	Continuous	N/A
Temperature-Eff °F(°C)	N/A	N/A	96 (35,6)	Continuous	N/A
Net Heat Rate MBTU/Hr OCT-MAY	N/A	N/A	338 (1)	Continuous	Calculated
Net Heat Rate MBTU/Hr JUN-SEPT	N/A	N/A	238 (1)	Continuous	Calculated
Free Available Chlorine (mg/l)	N/A	0.2	0.5	Contin(2)	N/A
Petroleum HC (mg/l) net	N/A	N/A	10 (3)	Twice Monthly	Grab
TSS (mg/l) net (4)	N/A	N/A	N/A	Twice Monthly	Grab
COD (mg/l) net (5)	N/A	N/A	50	Twice Monthly	Grab
pH Range (S.U.)	6	N/A	9	Twice Week	Grab
Asbestos(7)	N/A	N/A	N/A	Twice Monthly	Grab



**1.A EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):461A

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 461A; and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	Minimum	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
		Average	Maximum	Frequency	Sample type
Copper (mg/l) net (6)	N/A	N/A	0.2	Twice Monthly	Grab
Zinc (mg/l) net (6)	N/A	N/A	0.6	Twice Monthly	Grab
Chromium (mg/l) net (6)	N/A	N/A	0.2	Twice Monthly	Grab

- (1) The net rate of addition of heat is determined by the product of the heat capacity, discharge flow and discharge-intake temperature difference.
- (2) During periods of chlorination.
- (3) And no visible sheen.
- (4) Limitations for this parameter will be determined after the facility has been in operation for one year to enable establishment of a database.
- (5) Upon written request from the permittee this limit may be changed to 20 mg/l TOC.
- (6) Sampling is required only if maintenance chemicals containing these metals are used.
- (7) Monitoring shall be conducted using the EPA test, EPA-600/4-80-005, January, 1980, Interim Method for determining Asbestos in Water.

# 1.B EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):461C

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 461C; and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	Minimum	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
		Average	Maximum	Frequency	Sample type
Flow (MGD)	N/A	N/A	0.45	Continuous	N/A
Temperature °F (°C)	N/A	N/A	N/A	Weekly	Grab
Total Suspended Solids (mg/l)	N/A	30,45 (1)	100	Twice Monthly	Composite
COD (mg/l) (2)	N/A	N/A	100	Twice Monthly	Composite
Petroleum HC (mg/l)	N/A	10(3)	15 (3)	Twice Monthly	Grab
pH Range (S.U.)	6	N/A	9	Weekly	Grab
Ammonia (mg/l)	N/A	35	N/A	Twice Monthly	Composite
Copper (mg/l)	N/A	N/A	0.2	Twice Monthly	Grab
Iron (mg/l)	N/A	N/A	N/A(4)	Twice Monthly	Grab

(1) TSS shall not exceed 45 mg/l as a 7-day average.

(2) Upon written request from the permittee this limit may be changed to 50 mg/l TOC.

(3) And no visible sheen.

(4) Additional limitations for iron may be imposed after receipt of monitoring data.



# 1.C EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):462A, 463A and 464.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 462A, 463A, 464 and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	Minimum	Average	Maximum	Frequency	Sample type
Flow (MGD)	N/A	N/A	N/A	Monthly (1)	
pH Range (S.U.)	6.0	N/A	9.0	Monthly (1)	Grab
Petroleum Hydrocarbons (mg/l)	N/A	N/A	15	Monthly (2)	Mult. Grab
COD (mg/l)	N/A	N/A	100 (3)	Monthly (1)	Grab
TSS (mg/l)	N/A	30, 45 (4)	100	Monthly (1)	Grab

(1) During a discharge event.

(2) During the first precipitation event of the month which causes a discharge during working hours and which is preceded by a minimum dry period of 72 hours. The permittee shall take samples 15, 30 and 45 minutes after the onset of the discharge. The permittee shall analyze each sample individually and report a maximum value for the samples.

(3) Upon written request from the permittee this limit may be changed to 50 mg/l of TOC.

(4) TSS shall not exceed 45 mg/l as a 7-day average.

# 1.D EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):462B

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 462B; and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	Minimum	Average	Maximum	Frequency	Sample type
Flow (MGD)	N/A	N/A	N/A	Daily	Meter
BOD <sub>5</sub> (kg/day) lbs/day	N/A	(6.8) 15	N/A	Monthly	Grab
POD5 (% removal)	87.5	N/A	N/A	Monthly	Calculated
FSOD (kg/day) lbs/day	N/A	(8.2) 18	N/A	N/A	N/A
TSS (mg/l)	N/A	30, 45 (1)	100	Monthly	Composite
F.Coli (MPN/100ml)	N/A	200 (2)	400 (2)	Monthly	Grab
Oil and Grease (mg/l)	N/A	10 (3)	15 (3)	Monthly	Grab
pH Range (S.U.)	6.0	N/A	9.0	Twice Weekly	Grab
TSS (% Removal)	85	N/A	N/A	Monthly	Calculated

(1) TSS shall not exceed 45 mg/l as a 7-day average.

(2) This average shall be the geometric mean over a 30 consecutive day period and the maximum shall be a geometric mean over a 7-consecutive day period.

(3) And no visible sheen.

This permit shall supersede the limitations contained in TWA SC-5-76-5720 and TWA SO-76-0193-4.

# 1.E EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP and lasting through EDP + 5 years the permittee is authorized to discharge from outfall(s) serial number(s):463B

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the specified monitoring requirements shall be taken at the following location(s): at the outfall of DSN(s) 463B; and shall be reported monthly.

<u>EFFLUENT CHARACTERISTIC</u>	<u>DISCHARGE LIMITATIONS</u>			<u>MONITORING REQUIREMENTS</u>	
	Minimum	Average	Maximum	Frequency	Sample type
Flow (MGD)	N/A	N/A	N/A	Monthly	
pH Range (S.U.)	6.0	N/A	9.0	Monthly	Grab
TSS (mg/l)	N/A	N/A	50	Monthly	Grab
COD (mg/l) (1)	N/A	N/A	100	Monthly	Grab
Oil and Grease (mg/l)	N/A	10(2)	15(2)	Monthly	Grab
Iron (mg/l)	N/A	N/A	1.0	Quarterly	Grab
Copper (mg/l)	N/A	N/A	0.2	Quarterly	Grab
Cadmium (mg/l)	N/A	N/A	0.02	Quarterly	Grab
Chromium- Hex (mg/l)	N/A	N/A	0.1	Quarterly	Grab

(1) Upon written request of the permittee this limit may be changed to 50 mg/l of TOC.

(2) And no visible sheen.

1.E. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

<u>EFFLUENT CHARACTERISTIC</u>	Minimum	<u>DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
		Average	Maximum	Frequency	Sample type
Arsenic (mg/l)	N/A	N/A	0.1	Quarterly	Grab
Barium (mg/l)	N/A	N/A	2.0	Quarterly	Grab
Lead (mg/l)	N/A	N/A	0.1	Quarterly	Grab
Mercury (mg/l)	N/A	N/A	0.01	Quarterly	Grab
Selenium (mg/l)	N/A	N/A	0.02	Quarterly	Grab
Zinc (mg/l)	N/A	N/A	0.5	Quarterly	Grab
Nickel (mg/l)	N/A	N/A	N/A	Quarterly	Grab
Toxicity(Bioassay) LC 50(96-Hr.)	N/A	N/A	≥50% by volume	Quarterly	See Part IV. pp. 3 & 4

## 2. SURFACE WATER QUALITY REQUIREMENTS

The permittee shall discharge so as not to violate Surface Water Quality Standards for Zone 5 of the Delaware River, pursuant to N.J.A.C. 7:9-4.1 et seq., including but not limited to, the following:

### A. General Criteria

1. The waters shall not contain substances attributable to municipal, industrial, or other discharges in concentrations or amounts sufficient to preclude the specified water uses to be protected. Within this requirement:
  - (1) the waters shall be substantially free from unsightly or malodorous nuisances due to floating solids, sludge deposits, debris, oil, scum; and substances in concentrations or combinations which are toxic or harmful to human, animal, plant or aquatic life, or that produce color, taste, or odor in the water, or that taint fish or shellfish flesh.
2. In no case shall concentrations of substances exceed those values given for rejection of water supplies in the United States Public Health Service Drinking Water Standards.

### B. Alkalinity (mg/l)

Must be maintained between 20 and 120.

### C. Fecal Coliforms

Samples shall be taken at such frequency and location as to permit valid data interpretation. Geometric average not to exceed 770 per 100 ml. from R.M. 78.8 to 59.5, and 200 per 100 ml. from R.M. 59.5 to 48.2.

### D. Detergents, Synthetic (Methylene Blue Active Substances (MBAS)) (mg/l)

Maximum 30-day average of 1.0

### E. Dissolved Oxygen (mg/l)

Minimum 24 hour average concentration shall not be less than 3.5. at R.M. 78.8, 4.5 at R.M. 70.0 and 6.0 at R.M. 59.5. Seasonal average for periods from April 1 to June 15 and from September 16 to December 31 not less than 6.5 for the entire zone.



F. pH (standard units)

Must be maintained between 6.5 and 8.5.

G. Phenols (mg/l)

Maximum of 0.01, unless exceeded due to natural conditions.

H. Radioactivity (picocuries per liter)

Alpha emitters - maximum 3.

Beta emitters - maximum 1,000.

I. Solids, Total Dissolved (Filterable Residue)

Not to exceed 133 percent of background.

J. Temperature and Heat Dissipation Areas

1. Temperature, except in designated heat dissipation areas shall not be raised above ambient temperature by more than 4 degrees Fahrenheit during the period from September through May nor more than 1.5 degrees Fahrenheit during the period from June through August, nor shall maximum temperatures exceed 86.

2. The heat dissipation area for the cooling tower blowdown, DSN 461A, shall be defined as a rectangle extending 2500 feet upstream or downstream and 1500 feet outshore from the point of discharge.

K. Threshold Odor Number

Not to exceed 24 at 60 degrees Celsius.

L. Turbidity (Nephelometric Turbidity Unit - NTU)

Maximum 30 day average of 40 NTU, and a maximum of 150 NTU at any time, unless exceeded due to natural causes.



1. ADDITIONAL REQUIREMENTS OF THIS PERMIT

A. Operation of Treatment Works

The operation of the treatment works shall be under the continual supervision of an operator. The industrial operator shall meet the requirements of the Department of Environmental Protection of the State of New Jersey for an N2 License, pursuant to the provisions of N.J.S.A. 58:11-64 and amendments thereto. The operator of the sanitary wastewater treatment plant shall meet the requirements for an S2 license.

- B. In addition to the discharge monitoring report submitted to NJDEP in accordance with paragraph 11.I.(1) in Part I of this permit, the permittee shall also submit a duplicate signed copy of these, and all other reports required herein, to the following address(es):

Regional Administrator  
Region II  
U.S. Environmental Protection Agency  
26 Federal Plaza  
New York, N.Y. 10278  
ATTN: Permits Administration Branch

Delaware River Basin  
Commission  
P.O. Box 736  
West Trenton, NJ 08628  
ATTN: Mr. Seymour P. Gross  
Supervising Civil Eng.

- C. Pursuant to N.J.A.C. 7:9-5.4(b)(5), effective year-round disinfection shall be required for all treated wastewater discharges containing pathogenic organisms.

- D. In accordance with the DRBC Administrative Manual-Part III Basin Regulations-Water Quality recodified and revised to include amendments through March 10, 1980, the following shall be applied:

A. Stream Quality Objectives

1. Radioactivity

- a. alpha emitters maximum 3 pc/l (picocuries per liter);
- b. beta emitters-maximum 1,000 pc/l.

E. State and Local Requirements

1. Hazardous Waste Management

The permittee shall store, transfer, and dispose of its hazardous wastes in compliance with the "Manifest" provisions pursuant to N.J.A.C. 7:26-1 et seq.

2. Radiation

- a. The permittee shall comply with all regulations set forth in N.J.S.A. 26:2D-1 et seq. in regard to Radiation Protection.
- b. All radioactive wastes shall be collected, removed, and disposed of in accordance with N.J.A.C. 7:28-11.1 et. seq.

- F. Neither free available nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate that the units in a particular location cannot operate at or below this level of chlorination.
- G. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- H. With the exception of chromium and zinc, none of the 126 priority pollutants contained in maintenance chemicals added are to be detectable in the cooling tower blowdown. Compliance with the limitations for the 126 priority pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge.
- I. The permittee shall comply with all effluent limitations, monitoring requirements and other licensing conditions of the Nuclear Regulatory Commission.

2.A. Biomonitoring Requirements

Acute Toxicity

The permittee shall perform four definitive flow-through or definitive modified static renewal bioassay tests per year, in replicate, of its WTP treated process wastewater discharge. Tests are to be done on a quarterly basis. After completion of a minimum of four tests, the permittee may petition the Department for modification of the compliance biomonitoring requirements if the permittee believes that the test results support such a modification. The first bioassay test shall be initiated no later than three (3) months from the "Effective Date of Permit", unless otherwise specified by the NJDEP.

1. All bioassays shall be conducted in accordance with the following procedures:
  - a. Bioassay procedure shall conform to the "Regulations Governing Laboratory Certification and Standards of Performance" (N.J.A.C. 7:18). Subchapter 6 of the regulations contains the criteria and procedures for bioassay testing and analysis. The laboratory performing your bioassay testing will have to be within the laboratory certification program.
  - b. The bioassay shall provide a measure of acute toxicity as determined by the wastewater concentration which causes 50% mortality of the appropriate test organisms over a 96-hour period. Test results shall be expressed in terms of Lethal Concentration (LC) and reported as 96-hour LC-50.
  - c. For receiving waters having a salinity of less than or equal to 1 part per thousand (ppt), it is recommended that the fathead minnow (Pimephales promelas) be used as the test organism. With receiving waters having a salinity greater than 1 ppt, the mysid shrimp (Mysidopsis bahia) is recommended. The test temperature shall be  $22^{\circ}\text{C} \pm 2^{\circ}\text{C}$ .
2. The following information shall be submitted within two months from the Date of Permit:
  - a. An identification of the certified bioassay laboratory responsible for the conduct of the bioassay tests.
  - b. A detailed description of the methodology to be utilized in the conduct of the tests, including equipment, retention time of the wastewater in the treatment plant, collection method of a representative effluent sample, and name and source of test organisms.

- c. A schematic diagram which depicts the location that the effluent samples will be taken; the diagram shall indicate the location of effluent sampling in relation to any wastewater treatment facilities and Discharge Serial No.
3. Bioassay results shall be reported on a form provided and shall be submitted within 60 days after completion of the test.
4. The information requested (2a through 2c) and the bioassay test results (4) shall be submitted to:

Bureau of Permits Administration  
Water Quality Management  
Division of Water Resources  
CN-029  
Trenton, New Jersey 08625

Bureau of Systems Analysis and  
Wasteload Allocation  
Division of Water Resources  
CN-029  
Trenton, New Jersey 08625

NJPDES BIOMONITORING REPORT FORM

Permit No: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Facility Location: \_\_\_\_\_  
\_\_\_\_\_

Laboratory/Investigator: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approved by: \_\_\_\_\_  
Laboratory Director

Bioassay Conditions:

Test & Type: 24 Hour Static \_\_\_\_\_ 48 Hour Static \_\_\_\_\_ Daily Renewal \_\_\_\_\_

96 Hour Flow-through \_\_\_\_\_ 96 Hour Static \_\_\_\_\_

Test Starting Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Test Organism: Fathead Minnow \_\_\_\_\_ Other (Specify) \_\_\_\_\_  
(Pimephales promelas)

Summary of Results

<u>Sampling Location</u>	<u>Toxicity Observed</u> <u>(Yes or No)</u>	<u>LC50 (% effluent)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Quality Assurance Summary

Control Mortality 0% \_\_\_\_\_ <10% \_\_\_\_\_ >10% (specify) \_\_\_\_\_

Temperature maintained within  $\pm 2^{\circ}\text{C}$  of the test temperature? Yes \_\_\_\_\_ No \_\_\_\_\_

Dissolved oxygen levels always greater than 40% saturation? Yes \_\_\_\_\_ No \_\_\_\_\_

Loading factor for all exposure chambers less than or equal to maximum allowed for the test type and test temperature? Yes \_\_\_\_\_ No \_\_\_\_\_



Effluent Tested:

Sampling Location: \_\_\_\_\_

Type of Sample (circle one): Grab, 24 hour composite, Flow-through  
Composite of \_\_\_\_\_ grab samples

Sample Collection Dates/Time: Day 0 \_\_\_\_\_  
Day 1 \_\_\_\_\_  
Day 2 \_\_\_\_\_  
Day 3 \_\_\_\_\_  
Day 4 \_\_\_\_\_

Dilution Water:

Natural (Source) \_\_\_\_\_ (Collection Date) \_\_\_\_\_

Reconstituted (Type) \_\_\_\_\_

Other (Specify) \_\_\_\_\_

Percent Survival Data:

Exposure Time (hrs.)	Test Concentrations (Percent Effluent)											
	Control											
	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>	<u>A</u>	<u>B</u>
0.0	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

Bioassay Results:

24 hour      48 hour      72 hour      96 hour

LC50 (Percent Effluent) \_\_\_\_\_

95% Confidence Limits for \_\_\_\_\_ hour LC50: \_\_\_\_\_ to \_\_\_\_\_

Calculation Method (Source): \_\_\_\_\_

Test Organism Source:

Cultured (Check) \_\_\_\_\_ Other (Specify) \_\_\_\_\_

Commercial Hatchery (Specify) \_\_\_\_\_

Test Organism Age (days) \_\_\_\_\_

Test Organism Acclimation Period (days) \_\_\_\_\_

Number of Effluent Test Concentrations (Minimum of 5) \_\_\_\_\_

Number of Test Organisms/Test Concentration \_\_\_\_\_

Volume of Test Chambers (Liters) \_\_\_\_\_

Flow-through Bioassay Exchange Rate \_\_\_\_\_ (cycles/day)

LENGTH-WEIGHT DATA

Test Concentration (Percent Effluent)	Replicate	Total Length (mm)		Weight (g)		Loading Factor (g/l)
		$\bar{x}$	s	$\bar{x}$	s	

Control

# PHYSICAL-CHEMICAL DATA

Test Concentration (Percent Effluent)	Water Temp. (°C)			pH			DO (ppm)			range			Conductivity (unhos/cm)			Alkalinity mg/l as CaCO <sub>3</sub>			Hardness mg/l as CaCO <sub>3</sub>		
	$\bar{x}$	range	$\bar{x}$	$\bar{x}$	s	$\bar{x}$	$\bar{x}$	s	$\bar{x}$	range	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	$\bar{x}$	s	$\bar{x}$	s	$\bar{x}$	s
Control	(N= )	-	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	-	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )	(N= )
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N = The number of determinations used in calculating the mean and standard deviation values for each of the above physical-chemical parameters.



State of New Jersey  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

CN 029

TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.  
DIRECTOR

DIRK C. HOFMAN, P.E.  
DEPUTY DIRECTOR

Public Service Electric and Gas Company  
P.O. Box 570  
Newark, New Jersey 07101

JUL 11 1985

ATTN: Mr. James A. Shissias, General Manager  
Environmental Affairs

Re: Comments on NJPDES Draft Permit NJ0025411  
Hope Creek Generating Station  
Lower Alloways Creek Township, Salem County

Dear Mr. Shissias:

We have reviewed your comments on the draft permit for the Hope Creek Generating Station and have the following responses to the issues raised in your letter:

1. The wording of the Statement of Basis regarding composition of the cooling tower will be modified to state that portions of the cooling tower are composed of asbestos. We will also note that ammonium bisulfite is to be used as a dechlorinating agent rather than sulfur dioxide, and, that caustic soda or Sulfuric acid will be used for pH adjustment if necessary.
2. We believe that the BOD5/FSOD allocation question has been resolved by the Delaware River Basin Commission (DRBC) decision of June 6, 1985 increasing the allocation granted to Hope Creek from 3.4 pounds/day of BOD5 to 15 pounds/day with a corresponding increase of FSOD from 4.0 pounds/day to 18 pounds/day. We understand that this increase was necessary due to expansion of the Hope Creek Generating Station Sewage Treatment Plant from a design capacity of 0.051 MGD to 0.086 MGD.
3. Please note that Condition B of Part IV of the draft NJPDES-DSW permit includes a requirement specifying that DMRs shall be sent to EPA and DRBC as well as the NJDEP.

4. As stated in N.J.A.C. 7:14A-3.13(a)7 exceedance of only those parameters regulating discharge of toxic or hazardous substances must be reported within 24 hours, unless specifically noted in the permit. For the Hope Creek Generating Station these parameters are the metals; copper, cadmium, chromium, arsenic, lead, mercury, selenium, zinc, nickel and the toxicity (LC50) value.
5. Our Office of Quality Assurance has stated that the method of asbestos monitoring currently accepted by the Department is the EPA test, EPA-600/4-80-005, January, 1980, Interim Method for Determining Asbestos in Water. Therefore, this method will be specified in the final permit.
6. We will specify that DMR form space be provided for reporting both influent and effluent analyses for net limitation parameters.
7. Since the low volume wastewater treatment system collects wastewater throughout the site, we believe that the effluent is likely to vary from hour to hour. Therefore, a composite sample would better represent the actual effluent being discharged. Furthermore, the requirement to perform composite sampling for COD and ammonia should not impose any additional burden on PSE&G as composite sampling of these parameters was a requirement of the permit modification issued to PSE&G on September 25, 1984 for addition of DSN 461C, and was also included in PSE&G's proposal dated December 12, 1984.
8. Specification of composite sampling for BOD5 at DSN 462B was based upon PSE&G's proposal. However, since we do not believe a composite sample is necessary at the sewage treatment plant, and since the former permit for Hope Creek required grab samples, the final permit will require grab samples for BOD5 rather than composite samples.

Reference to TWA SO-76-0193-4 will be made in the final permit as requested.
9. The bioassay toxicity will be limited as a value greater than or equal to 50 percent in the final permit. However, the more sensitive mysid shrimp (*Mysidopsis bahia*) is the appropriate standard salt water/estuarine test organism for the saline areas of the Lower Delaware River.
10. The recently promulgated revised New Jersey Surface Water Quality Standards specify a value not to exceed 133 percent of background for total dissolved solids (TDS) in Zone 5 of the Delaware River. Therefore, the 500 mg/l TDS instream



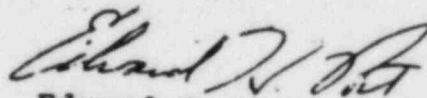
value specified in condition D of Part III, Section 2, will be deleted in the final permit for Hope Creek.

Please note that the following changes have been incorporated into the final permit as per comments received from the United States Environmental Protection Agency and the DRBC, and changes in regulations.

1. Revisions to the New Jersey Surface Water Quality Standards were promulgated on May 20, 1985, therefore, the revised standards for Zone 5 of the Delaware River are included in the final permit.
2. The DRBC has informed us that DRBC Docket D-73-193 CP (Revised), approved by the Commission on April 25, 1984, assigned a specific heat dissipation area for the cooling tower blowdown. This area, defined by DRBC as a rectangle extending 2500' upstream or downstream and 1500' offshore from the point of discharge, has been included in the final permit.
3. A minimum limitation of 85 percent removal of suspended solids (TSS) has been added to the effluent requirements imposed for DSN 462B in the final NJPDES-DSW permit pursuant to the United States Environmental Protection Agency limitations for secondary treatment as set forth in 40CFR Part 133 for sanitary wastewater.

The final NJPDES-DSW permit for the Hope Creek Generating Station will be issued in accordance with the preceding responses. If you have any questions regarding this letter, please contact me or Melisse Wilusz of my staff at (609) 292-0407.

Sincerely,



Edward H. Post, P.E., Chief  
Industrial Permits Section  
Bureau of Industrial Waste Management

WQM70:cdg

cc: Mr. E. Svenson, PSE&G  
Mr. G. Meyer, EPA-Region II  
Mr. S. Gross, DRBC

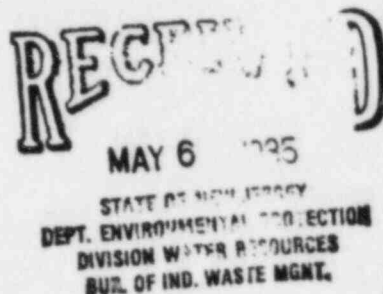
**PSE&G**Public Service  
Electric and Gas  
Company*Ed Post*

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 2, 1985

Mr. Arnold Schiffman, Administrator  
Water Quality Management  
N.J. Department of Environmental Protection  
Division of Water Resources  
Industrial Waste Management  
CN-029  
Trenton, New Jersey 08625



Dear Mr. Schiffman:

COMMENTS - NJPDES DRAFT PERMIT NJ0025411  
HOPE CREEK GENERATING STATION  
PUBLIC SERVICE ELECTRIC AND GAS COMPANY

The Company's staff has reviewed the Hope Creek NJPDES - DSW draft permit NJ 0025411 which was published on April 16, 1985. We appreciate the Department's expeditious and timely issuance of the draft permit. As we have previously discussed, a timely final permit is essential for Hope Creek to meet its startup schedule.

- 1) Page 5 of 13, Description of Limitations and Conditions, DSN 461A -  
Only the fill, drift eliminator components and distribution piping of the tower contain asbestos. A comment concerning monitoring for asbestos is made under the permit limitation section.

Also, it has been determined in consultation with the cooling tower manufacturer and Betz Laboratories that a better dechlorinating agent is ammonium bisulfite rather than sulfur dioxide as originally described in the Company's application. In addition, pH adjustment of the cooling tower water may require the injection of caustic soda rather than sulfuric acid.

- 2) Page 6 of 13, Description of Limitations and Conditions, DSN 462B -  
The relationship of FSOD to BOD5 has been previously considered in existing NPDES permits. The application of a 1.2 ratio in effect reduces the station's BOD allocation. Hope Creek needs the full allocation. Furthermore, Hope Creek needs to retain the BOD allocation made by DRBC. In a letter from the DRBC's Director, Mr. J. Wright, to PSE&G on February 21, 1975, Hope Creek's sewage treatment system was given a waste load allocation of 13 pounds per day for the construction phase of the project. Although our 1975 NJPDES permit reflected only 4 lbs/day, a permit modification was not requested because the plant loading was minimal.

May 2, 1985

As Hope Creek goes through start-up operations, a greater number of site personnel and system appurtenances are putting increasing demands on the system. This is evidenced in our 1984 renewal application, in which a maximum BOD (mass) of 8.7 Kg (19.1 lb.)/day was described for the sewage treatment plant. As a result, we find that the DRBC's original allocation to Hope Creek is needed. We request that DSN No. 462B in our new NJPDES permit reflect this provision. Once Hope Creek becomes operational, PSE&G will submit a permit modification reflective of those new conditions.

We believe that the 13 lb./day waste load allocation for BOD-5 may be used to develop a value for FSOD as well. However, employing FSOD as a viable limitation should only be done if the specific, first-order rate constant ( $K'$ ) for Hope Creek's sewage effluent is determined and used to reflect the greater value associated with the FSOD/BOD ratio. That is, if the FSOD/BOD ratio is 1.2 (assuming  $K'$  proves this out", the new FSOD for Hope Creek will be 15.6 lbs/day (BOD-5 equals 13 lbs/day).

- 3) Part I, Page 7 of 16, Item 11.I. Discharge Monitoring Reports- Presently Hope Creek personnel are also sending DMR reports to EPA and DRBC. Shouldn't these agencies also be specified in the permit?
- 4) Part I, Page 10 of 16, Item 14.F(6) - The statement could be interpreted that any discharge limitation exceedance must be reported within 24 hours. This needs clarification.
- 5) Part III, Page 1 of 9, Effluent Limitation and Monitoring Requirements, DSN 461A - The asbestos laboratory protocol needs to be identified. The normal protocol would be to use an electron microscope to count fibers. However, for saline waters in the presence of other suspended matter, this would be extremely difficult. The monitoring of asbestos should only be instituted if there are qualified laboratories readily accessible and when there is a sampling and testing procedure mutually agreed to by the permittee and the NJDEP.
- 6) When the DMR preprinted forms are made by the Department, we request that the Department provide reporting space for both the influent and effluent analyses for those parameters to be calculated as net.
- 7) Part III, Page 3 of 9, Effluent Limitations and Monitoring Requirements, DSN 461C - The composite sampling for COD and ammonia requires special refrigeration sampling equipment for sample preservation. A justification for this sampling requirement is requested, or substitution to that of a grab sample.

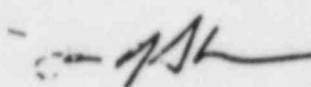
- 8) Part III, Page 5 of 9, Effluent Limitations and Monitoring Requirements, DSN 462B - The composite sampling requirement for BOD5 would require a special protocol - was this what was intended?

Also, the reference to TWA SC-5-76-5720 should also include TWA SO-76-0193-4 because the present sewage treatment works was constructed under two separate approvals.

- 9) Part III, Page 7 of 9, Effluent Limitations and Monitoring Requirements, DSN 463B - The bioassay limit, to be consistent with other permits should be expressed as a value greater than or equal to 50%. Also, we request that the test species be sheepshead minnow as it is at Salem Generating Station. It is likely that both stations will be using the same certified laboratory which contractually will be more economical and easier to supervise.
- 10) Part III, Page 8, Surface Water Quality Requirements, Item D TDS - The 500 mg/l limitation for river TDS beyond the mixing zone cannot always be met. The Hope Creek Environmental Report has tabulated ambient Delaware River TDS to average 3500 to 8900 mg/l with a low of 600 mg/l and a high of 16000 mg/l. The cooling tower only concentrates and returns to the river TDS already present in the river.

If you should have any questions concerning these comments, please contact Eric Svenson at (201) 430-5860.

Sincerely,



CC: Paul C. Kurisko  
Edward Post  
Melisse Wilusz





JAMES F. WRIGHT  
EXECUTIVE DIRECTOR

*From: J. D. Cooley*

DELAWARE RIVER BASIN COMMISSION

P. O. BOX 380

TRENTON, NEW JERSEY 08603

(609) 883-8500

Sent Via Teletype

Time 2:30 Date 5/9/75  
Bechtel Jobsite 10858

HEADQUARTERS, SECTION  
25 STATE POLICE DRIVE  
WEST TRENTON, N. J.

HOPE CREEK PROJECT

☐ PM Noted *APM*

FEB 20 1975 February 21, 1975

<input checked="" type="checkbox"/> Mech.	<input type="checkbox"/> PC/Q	<input type="checkbox"/> Constr.
<input type="checkbox"/> Cost	<input type="checkbox"/> Lia.	<input type="checkbox"/> Cost
<input type="checkbox"/> Elec.	<input type="checkbox"/> Des.	<input type="checkbox"/> QA
<input type="checkbox"/> Stres.		<input type="checkbox"/> Prod.

Action \_\_\_\_\_ P/U \_\_\_\_\_ File ✓

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Public Service Electric & Gas Company  
80 Park Place  
Newark, New Jersey 07101

Attention: Mr. R. L. Mithl, General Manager - Projects  
Engineering and Construction Department

Subject: Wastewater Treatment Facility for the  
Hope Creek Generating Station, Salem County

Gentlemen:

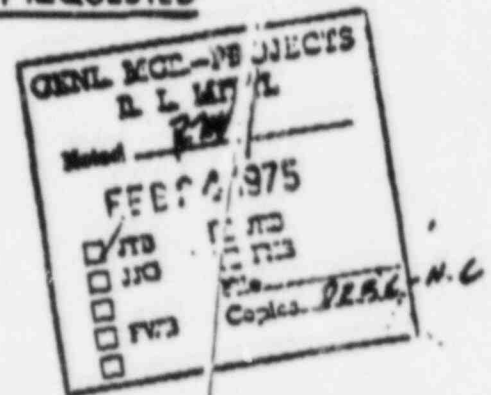
PLEASE TAKE NOTICE that pursuant to Article 5 and Section 14.2 of the Delaware River Basin Compact (75 Stat. 688) and Article 3-3 of the Basin Regulations - Water Quality (effective April 7, 1968) adopted by the Delaware River Basin Commission pursuant to the Compact, the Commission will allocate the waste assimilative capacity of the Delaware River Estuary among individual dischargers.

The proposed allocations for the above-named discharger at the facility cover two time periods and are as follows:

13 pounds per day of carbonaceous (first stage) oxygen demand during the generating station construction period.

4 pounds per day of carbonaceous (first stage) oxygen demand following completion of construction of the generating station.

The proposed allocations will take effect, with further notice, as the determination of the Executive Director under the Regulations unless the discharger shall file with the Commission, within 20 days after the service hereof, a request for a hearing at which the discharger may show cause why the proposed allocations should not take effect.

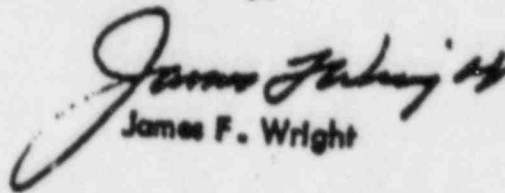




You are reminded that in addition to meeting the allocation requirements, the facility must be operated at all times to comply with the requirements of the Basin Regulations - Water Quality.

An application for approval of the Hope Creek Generating Station under Section 3.8 of the Compensatory Law has been submitted and is awaiting state approval before presentation to the Commission for consideration. The above allocations are granted subject to the condition that the project is approved by the state and the Commission.

Sincerely,

  
James F. Wright

cc: Mr. T. Seigle, J., NJDEP  
Mr. J. T. Boringer, Public Service  
Electric & Gas Co.



State of New Jersey  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER RESOURCES

CN 029

TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.  
DIRECTOR

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George C. Meyer, P.E., Chief  
Permits Management Section  
Water Permits and Compliance Branch  
U.S. EPA Region II  
26 Federal Plaza  
New York, New York 10278

JUL 30 1985

RE: NJPDES-DSW Draft Permit Renewal NJ0025411  
Public Service Electric and Gas Company  
Hope Creek Generating Station  
Lower Alloways Creek Township, Salem County

Dear Mr. Meyer:

This letter is in response to your letter dated June 11, 1985, providing comments on the NJPDES-DSW Draft Permit for the Hope Creek Generating Station. We have the following responses to these comments:

General Comments

1. The Statement of Basis states that the basis for the COD and petroleum hydrocarbon limitations at DSN 461A and the COD limitation at 461C is Best Professional Judgment (BPJ), and that the EPA Regional Guidance was considered in making this judgment. Furthermore, the EPA Effluent Guidelines for the Steam Electric Power Generating Point Source do not address these parameters and, therefore, could not be applied.
2. DSN 460, noted in the permit modification issued on October 10, 1984, has become 463B at PSE&G's request. A statement noting this will be added to the Statement of Basis.
3. The statement you refer to regarding discharge of polychlorinated biphenyl compounds (PCBs) was included in the Draft Permit as Condition G of Part IV, Page 2 of 5 Pages.
4. The TSS limitation of 100 mg/l maximum was established by Best Professional Judgment in consideration of achievability, consistency with other second round permits issued to PSE&G, and that the Steam Electric Power Generating Point Source Category Effluent Guidelines specify a BPT value of 100 mg/l maximum for TSS for several types of power plant wastewater.

DSN 461A

1. PSE&G requested application of net limitations for the parameters noted since they may be present in the Delaware River intake water. The former NPDES Permit, issued July 31, 1975, did not contain language prohibiting use of corrosion inhibitors. Therefore, such language was not included in the renewal permit. However, PSE&G does not have any intention of using corrosion inhibitors at this time.
2. Your assumption that the 2 units originally planned for the Hope Creek Generating Station were to be identical is correct. Furthermore, we believe that the explanation for the net heat rate limitations provided by the Draft Permit Statement of Basis is sufficient.
3. The statement you refer to regarding discharge of free available and total residual chlorine was included in the Draft Permit as Condition F of Part IV, Page 2 of 5 Pages.
4. A statement will be added to the Basis stating that the chromium limitation is also based upon the Steam Electric Power Generating Point Source effluent guidelines.

DSN 461C

1. The permit modification, issued for the Hope Creek Generating Station on September 25, 1984, adding this outfall included a flow limitation. Therefore, this value was carried over from the former permit.

DSN 462B

1. The limitations imposed for BOD<sub>5</sub>, pursuant to the Delaware River Basin Commission (DRBC) Regulations, are more stringent than those required by 40 CFR Part 133 for secondary treatment. Therefore, these limitations will remain unchanged in the Final Permit. However, we will add the limitation of 85% removal of TSS to the Final Permit in accordance with 40 CFR Part 133.
2. Both the BOD<sub>5</sub> and FSOD values for DSN 462B are based upon the DRBC minimum allowable zone percent BOD<sub>5</sub> reduction required for secondary treatment in accordance with Section 4.30.2 et seq. of the Administrative Manual Part III, Basin Regulations - Water Quality. The ratio of FSOD to BOD<sub>5</sub> of 1.2 is the value that DRBC determined as representing the ratio of FSOD to BOD<sub>5</sub> for this facility.

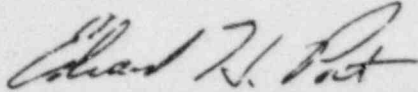
DSN 463B

1. The previously reported values for metals during the term of the permit modification were fairly consistent. Therefore, the monitoring frequencies were reduced.

2. We do not anticipate that the permittee will exceed the proposed cadmium limitation. Therefore, a compliance schedule or Administrative Order is not necessary.

If you have any questions regarding this letter, please contact me or Ms. Melisse Wilusz of my staff at (609) 292-0407.

Sincerely,



Edward H. Post, P.E., Chief  
Industrial Permits Section  
Bureau of Industrial Waste Management

WQM70:tmc



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

JUN 11 1985

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

Mr. Edward H. Post, P.E.  
Section Chief  
Industrial Permits  
Water Quality Management  
New Jersey Department of  
Environmental Protection  
P.O. Box CN-029  
Trenton, New Jersey 08625

RECEIVED

JUN 14 1985

STATE OF NEW JERSEY  
DEPT. ENVIRONMENTAL PROTECTION  
DIVISION WATER RESOURCES  
BUL. OF IND. WASTE MGMT.

Dear Mr. Post:

This letter serves to inform you that the United States Environmental Protection Agency (EPA), Region II, has reviewed the draft permit NJPDES NJ0025411, for Public Service Electric and Gas Company, Hope Creek Generating Station and evaluated the nature of its discharge into the Delaware River (Zone 5) from its facility located at Foot of Buttonwood Road, Artificial Island, Lower Alloways Creek Twp., Salem County, New Jersey. Comments on this matter were requested by the New Jersey Department of Environmental Protection in a letter dated April 16, 1985.

The EPA, Region II has the following comments on the above referenced permit:

General Comments

1. Although the basis for the COD and Petroleum Hydrocarbons parameters of DSN461A and the COD parameter of DSN461C is EPA Regional guidance, this guidance was not intended to be used for discharges of these types. Instead, the development document and the effluent guidelines for this point source should be used to develop appropriate limits.
2. In the permit modification issued October 10, 1984, a new discharge (DSN 460) is mentioned. However, there is no mention of this discharge in the draft permit. Please justify the exclusion of DSN460 from the permit. If justification cannot be provided, then please include this discharge in the permit.
3. The effluent guidelines stipulate that there shall be no discharge of polychlorinated biphenyl compounds (PCBs). Such a statement, however, cannot be found in the draft permit. Therefore, please incorporate this PCB limitation into the draft permit where appropriate.



4. A maximum TSS value of 100mg/l is proposed for discharges 462A, 463A, 464, and 462B. Although it is stated that this value is BPJ, the rationale used in developing this limit is unclear. Please explain the method used to develop this limitation.

DSN 461A

1. Net limitations are proposed for the parameters Petroleum Hydrocarbons, TSS, COD, Copper, Zinc, and Chromium. If Copper, Zinc, and Chromium are strictly in the intake water, then net limitations for these parameters may be claimed.

Also, if this discharge is a 1974 new source, the 1974 effluent guidelines remain in effect. These guidelines prohibit the addition of corrosion inhibitors to discharges of this type. Please determine if these regulations apply, and then impose limitations accordingly.

2. It is stipulated in the Statement of Basis that the summer and winter net heat rates are half of the original values, since the original values were intended for a 2-unit operation. It is assumed that the second unit was to be identical to the first, and that this is the basis for halving the original values. Please verify this assumption and state it in the Statement of Basis.
3. The effluent guidelines for this point source state that neither free available chlorine nor total residual chlorine may be discharged from any unit for more than 2 hours in any one day. However, this statement cannot be found in the draft permit. If this statement is missing, please incorporate it into the permit where appropriate.
4. The limitations for pH and the metals are based on DRBC regulations. However, it should be stipulated in the Statement of Basis that the Chromium limitation is based upon the effluent guidelines for this point source as well.

DSN 461C

1. A flow limitation is imposed on this discharge, and the value of this limitation is the design capacity of the permittee's treatment system. The reason for imposing a limitation on this discharge while not imposing similar limitations on the other discharges which undergo treatment is not clear. Please justify the rationale for imposing such a limitation.

DSN 462B

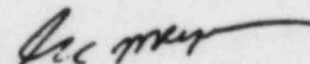
1. Although limitations for BOD<sub>5</sub> and TSS are imposed for this discharge, the permittee must meet the secondary treatment limitations of 40 CFR Part 133 for sanitary waste. If these limitations are not imposed, please incorporate them into the draft permit.
2. The BOD<sub>5</sub> mass limitation has been derived from the first stage carbonaceous oxygen demand by using a ratio of 1.2. However, the rationale for using this particular ratio is unclear. Therefore, please justify the use of a 1.2 ratio.

DSN 463B

1. It is stipulated that the monitoring frequencies for the metals has been decreased in the draft permit. However, if the previously reported values are fairly constant throughout the year, then the proposed frequencies will be appropriate.
2. According to the information provided in the permit summary table, there is a possibility that the permittee may exceed the proposed limit for Cadmium. If the permittee is not able to meet revised water quality limits, then a compliance schedule should be provided in the permit. If technology based limits, limits developed through EPA guidance, or water quality limits which have not been revised cannot be met, then an Administrative Order should be issued.

If you have any comments or inquiries, please feel free to contact Mr. Dit Fai Cheung of my staff at (212) 264-3522.

Sincerely,



George C. Meyer, P.E., Chief  
Permits Management Section