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EXHIBIT M5

WATER QUALITY MANAGEMENT PERMIT  
FOR PWD's SWWPCP

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## WATER QUALITY MANAGEMENT PERMIT

NO. 5172419

A. PERMITTEE: (Name and Address)  City of Philadelphia Water Department Room 1160 Municipal Services Bldg. Philadelphia, Pa. 19107		B. PROJECT LOCATION  Municipality <u>City of Philadelphia</u>  County <u>Philadelphia</u>	
C. TYPE OF FACILITY <u>Southwest Sewage Treatment Plant</u> <u>(Upgrading and expansion)</u>		D. NAME OF MINE OR AREA SERVED <u>Southwest Philadelphia and adjacent</u> <u>suburban areas</u>	
E. THIS PERMIT APPROVES:			
1. Plans For Construction Of:  a. <input type="checkbox"/> Pump Stations: Sewers and Appurtenances  b. <input checked="" type="checkbox"/> Sewage Treatment Facilities  c. <input type="checkbox"/> Industrial Wastes Treatment Facilities		2. The Discharge Of:  a. <input checked="" type="checkbox"/> Treated  <input type="checkbox"/> Untreated  b. <input type="checkbox"/> Industrial Wastes  <input checked="" type="checkbox"/> Sewage  TO: <u>Delaware River</u>  (Receiving Waters)	
		3. The Operation Of: <u>N . A.</u>  a. <input type="checkbox"/> Mine  Maximum surface area to be affected shall not exceed _____ acres. (Surface Mines)  Maximum area to be deep mined _____ acres.	

## F. YOU ARE HEREBY AUTHORIZED TO CONSTRUCT, OPERATE OR DISCHARGE, AS INDICATED ABOVE, PROVIDED THAT YOU COMPLY WITH THE FOLLOWING:

1. ALL REPRESENTATIONS REGARDING OPERATION, CONSTRUCTION, MAINTENANCE AND CLOSING PROCEDURES AS WELL AS ALL OTHER MATTERS SET FORTH IN YOUR APPLICATION AND ITS SUPPORTING DOCUMENTS (APPLICATION NO. 5172419 DATED Oct. 31, 1972 AND AMENDMENTS DATED May 8, 1973) SUCH APPLICATION, ITS SUPPORTING DOCUMENTS AND AMENDMENTS ARE HEREBY MADE A PART OF THIS PERMIT.

2. CONDITIONS NUMBERED 1 2 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 29 30 OF THE Sewerage STANDARD CONDITIONS DATED 1972 WHICH CONDITIONS ARE ATTACHED HERETO AND ARE MADE A PART OF THIS PERMIT.

3. SPECIAL CONDITION(S) NUMBERED I WHICH ARE ATTACHED HERETO AND ARE MADE A PART OF THIS PERMIT.  
This permit must be recorded in the Recorder of Deeds office in Philadelphia County

## G. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:

1. IF THERE IS A CONFLICT BETWEEN THE APPLICATION OR ITS SUPPORTING DOCUMENTS AND AMENDMENTS AND THE STANDARD OR SPECIAL CONDITIONS, THE STANDARD OR SPECIAL CONDITIONS SHALL APPLY.

2. FAILURE TO COMPLY WITH THE RULES AND REGULATIONS OF THE DEPARTMENT OR THE TERMS OR CONDITIONS OF THIS PERMIT SHALL VOID THE AUTHORITY GIVEN TO THE PERMITTEE BY THE ISSUANCE OF THE PERMIT.

3. THIS PERMIT IS ISSUED PURSUANT TO THE CLEAN STREAMS LAW, THE ACT OF JUNE 22, 1937, P.L. 1987, AS AMENDED. ISSUANCE OF THIS PERMIT SHALL NOT RELIEVE THE PERMITTEE OF ANY RESPONSIBILITY UNDER ANY OTHER LAW.

PERMIT ISSUED

DATE

10-1-73

DEPARTMENT OF ENVIRONMENTAL RESOURCES

BY

C.T. Beckman

TITLE

Regional Sanitary EngineerMorrisstown Office

Sewerage Permit No. 5172419

Southwest Sewage Treatment Plant

This permit is subject to the following Special Condition

1. The plant hereby approved is required effect secondary treatment of the sewage which it receives. For the purpose of this permit, secondary treatment is that treatment that will:

During the period May 1 through October 31 reduce the organic wasteloads as measured by the biochemical oxygen demand test by at least 89% and limit the amount of carbonaceous oxygen demand that may be discharged in the effluent from the City of Philadelphia's Southwest Sewage Treatment Plant to 29,000 lbs. per day (30 consecutive day average of values).

During the period November 1 through April 30 reduce the organic wasteloads as measured by the biochemical demand test by at least 82% and limit the amount of carbonaceous oxygen demand that may be discharged in the effluent from the City of Philadelphia's Southwest Sewage Treatment Plant to 48,300 lbs. per day (10 consecutive day average of values).

The suspended solids in the effluent shall not exceed 30 mg/l (based on a five consecutive day average of values)

In addition, secondary treatment is that treatment that will provide effective disinfection to control disease producing organisms, will provide satisfactory disposal of sludge and will reduce the quantities of oil, grease, acid, alkalis, toxic, taste and odor producing substances inimical to the public interest to levels that will not pollute the receiving stream.

1875 New Hope Street  
Norristown, Pa. 19401  
215 631-2405

June 23, 1978

Mr. Carmen F. Guarino  
Water Commissioner  
Philadelphia Water Department  
1180 Municipal Services Building  
Philadelphia, Pa. 19107

SUBJECT: Sewerage Permit No. 5172419  
Southwest Water Pollution Control Center  
City of Philadelphia, Philadelphia County

Dear Mr. Guarino:

We have completed our review of the plans and specifications for the additional sludge digestion facilities at the Southwest Plant which provide the needed capacity for processing sludge generated at the Southeast plant. The proposed facilities are approvable and Permit No. 5172419 is hereby amended to include those facilities included in the final plans and specifications received on March 22, 1978 and covered in the revised permit modules received on December 14, 1977. If you have any questions, feel free to contact a member of the facilities section of this office.

Very truly yours,

C.T. Seachwood  
Regional Sanitary Engineer

CTB:jp  
CC: John Capacazza (EPA)  
Compliance and Administration  
(RE) CE 30

1875 New Hope Street  
Morristown, Pennsylvania 19401  
215 631-2425

August 29, 1978

Mr. Carmen F. Guarino, Commissioner  
City of Philadelphia  
Water Department  
1150 Municipal Services Building  
Philadelphia, PA 19107

Re: Sewerage Permit No. 5172419-  
Southwest Water Pollution Control Center  
City of Philadelphia

Dear Mr. Guarino:

We have completed our review of the plans and specifications for the Sludge Recycle Center at the subject facility. The proposed facilities are approvable from a water quality management standpoint and Permit No. 5172419 is hereby amended to include those facilities included in the final plans and specifications received on February 8, 1978. If you have any questions, feel free to contact a member of the Facilities Section of this office.

Please note that this approval does not relieve your responsibility for obtaining a permit from the Division of Solid Waste Management for the composting facilities included in the Recycle Center.

Very truly yours,

C.T. Beechwood  
Regional Sanitary Engineer

CTS/JK/11

cc: John Capacasa (EPA)  
Compliance & Administration  
Cc Re 30

PENNSYLVANIA DEPARTMENT OF HEALTH  
SANITARY WATER BOARD

STANDARD CONDITIONS RELATING TO SEWERAGE

Effective November 1, 1942.

ONE: All relevant and non-superseded conditions of prior sewerage permits, decrees, or orders issued to the herein named permittee or his predecessor shall be continued in full force and effect.

TWO: During construction no radical changes shall be made from the plans, designs, and other data herein approved unless the permittee shall first submit each such revision to the Sanitary Water Board and receive written approval thereof.

THREE: The works shall be constructed under expert engineering supervision and competent inspection, and in accordance with the plans, designs, and other data as herein approved or amended, and with the conditions of this permit.

FOUR: During construction the herein approved sewers shall be so laid and such care and skill shall be used in their construction as will insure that they conform to the following requirements:

(a) They shall have well-fitted joints made tight to reduce infiltration to a minimum; shall be laid with straight alignment and to true grade; and shall have smooth interior surfaces.

(b) They shall have adequate foundation support by means of the natural soil; or by an approved, especially prepared foundation of piling, concrete cradle, or encasement, or otherwise as conditions require; and their trenches shall be so back-filled that the sewers will have proper structural stability, minimum settlement, and adequate protection against breakage.

(c) To these ends special care shall be taken in the placing of sewers under deep or shallow cover, under heavy loading, in stream crossings, in rock or wet excavations, or under other conditions which impose extra hazards upon their construction.

(d) All concrete used in connection with these sewers and their appurtenances shall be so placed and protected until cured that it will not be injured by water, freezing, drying, or otherwise.

(e) The type and material of both sewer pipe and joint shall be so selected in accordance with actual field and construction conditions, and shall be so incorporated into the work as to conform to the aforesaid requirements.

FIVE: Manholes shall be placed and constructed as shown upon the herein approved plans except, that if not already so provided, they shall be placed on all sewers at junctions, at each change in grade or alignment, at summit ends, and upon straight lines at intervals not exceeding four hundred feet, or wherever necessary to permit satisfactory entrance to and maintenance of the sewers; manhole inverts shall be so formed as to facilitate the flow of the sewage and to prevent the stranding of sewage solids, and the whole manhole structure shall have proper structural strength and be so constructed as to prevent undue infiltration, entrance of street wash or grit, and to provide convenient and safe means of access and maintenance.

SIX: No storm water from pavements, areaways, roofs, or other sources shall be admitted to the sanitary sewers herein approved, which shall be used exclusively as carriers of domestic sewage and suitable industrial wastes.

Storm water shall be admitted only to such sewers as are specifically approved for use as combined sewers.

SEVEN: Attention is directed to the necessity of having a qualified person make proper study of all industrial wastes proposed for discharge to the public sewer system, to determine the degree of preliminary treatment, if any, which is necessary before these wastes may be discharged to the said system.

No industrial wastes shall be discharged to the sewer system which will prejudicially affect the sewerage structures or their functioning, or the processes of sewage treatment, and any permission granted by the permittee for industrial wastes discharge into the sewer system should reserve to the permittee the right to regulate the rate of such discharge or to require such further preliminary treatment as may be necessary, or the exclusion of the said industrial wastes from the sewers, if this be deemed necessary to protect the permittee's interests.

EIGHT: The permittee shall forthwith adopt and enforce an ordinance requiring all occupied buildings on premises accessible to a public sewer used in conformity with the requirements of State laws, to be connected thereto; also requiring the abandonment of privies, cesspools or similar receptacles for human excrement on said premises; and also prohibiting any connection from any privy vault or cesspool being made to the public sewer system.

NINE: In accordance with the provisions of State laws regarding connection to sewers and the rules and regulations of the Pennsylvania Department of Health pertaining thereto, the permittee shall forthwith require all occupied buildings on premises accessible to a public sewer used in conformity with the requirements of State laws, to be connected thereto; and shall also require the abandonment of privies, cesspools or similar receptacles for human excrement on said premises; and shall also prohibit any connection from any privy vault or cesspool being made to any approved sewers.

TEN: The herein approved and previously constructed sewers shall be maintained in good condition, by repair when necessary, and kept free from deposits by flushing or other proper means of cleansing, in order that they may at all times afford a proper means for the prompt conveyance of sewage.

ELEVEN: No sewers or sewerage work shall be constructed except such as are herein approved or have been approved by a prior permit still valid; and on or before December thirty-first of each year the permittee shall file in the office of the State Department of Health satisfactory record, or detail plans, showing the correct plan of all sewers and sewerage structures as actually constructed during that year, together with any other information in connection therewith that may be required, in order that the Sanitary Water Board may at all times have full information as to the extent and use of the system.

TWELVE: The outfall sewer shall be extended to low water mark of the receiving body of water in such a manner as to insure the satisfactory dispersion of its effluent therein; insofar as practicable it shall have its outlet submerged; and shall be constructed of cast iron, concrete, or other material approved by the Bureau of Sanitary Engineering; and shall be so protected against the effects of flood water, ice, or other hazards as to reasonably insure its structural stability and freedom from stoppage.

THIRTEEN: The permittee shall secure any necessary permission



from the proper federal authority for any outfall or sewerage structure which discharges into or enters navigable waters and shall obtain from the State Water & Power Resources Board approval of any stream crossing, encroachment, or change of natural stream conditions coming within the jurisdiction of the said Board.

FOURTEEN: If at any time the sewerage system of the permittee, or any part thereof, or the discharge of sewage therefrom, shall have created a public nuisance, or such discharge is or may become inimical and injurious to the public health or to animal or aquatic life or to the use of the receiving water for domestic or industrial consumption, or for recreation, the permittee shall forthwith adopt such remedial measures as the Sanitary Water Board may advise or approve.

FIFTEEN: Nothing herein contained shall be construed to be an intent on the part of the Sanitary Water Board to approve any act made or to be made by the permittee inconsistent with the permittee's lawful powers or with existing laws of the Commonwealth regulating sewerage and the practice of professional engineering, or shall be construed as approval of the structural adequacy of the approved structures; nor shall this permit be construed to permit any act otherwise forbidden by any of the laws of the Commonwealth of Pennsylvania or of the United States.

SIXTEEN: The improvements being effected in the waters of the State through the progressive, sanitary clean-up of streams by the Sanitary Water Board render the effects of untreated municipal sewage and industrial wastes upon these waters increasingly harmful or inimical to the public interest, in consequence of which the time should be anticipated when such sewage and/or industrial wastes must be suitably modified prior to its discharge thereto.

Therefore, the permittee is hereby notified that when the Sanitary Water Board shall have determined that the public interests require the treatment or further treatment of the sewage and/or industrial wastes of the permittee, then the permittee shall, upon notice by the Board, within the time specified, submit to the Board for its approval, plans and a report providing for the degree of treatment of the permittee's sewage and/or industrial wastes specified by the Board and after approval thereof shall construct such works in accordance with the directions of the Board.

SEVENTEEN: The approval herein given is specifically made

contingent upon the permittee acquiring all necessary rights, by easement or otherwise as required, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along, or across private property, with full rights of ingress, egress and regress.

EIGHTEEN: Promptly upon completion of the herein approved sewerage, duplicate detail record plans showing these works as actually constructed, shall be filed with the Sanitary Water Board for its information.

NINETEEN: When the herein approved sewage treatment works is constructed and before it is placed in operation, the permittee shall notify the State Department of Health so that an inspection of the works may be made by a representative of the Department.

TWENTY: The various structures and apparatus of the sewage treatment works herein approved shall be maintained in proper condition so that they will individually and collectively perform the functions for which they were designed.

TWENTY-ONE: The screenings and sludge shall be so handled that a nuisance is not created and shall be disposed of in a sanitary manner to the satisfaction of the Sanitary Water Board.

TWENTY-TWO: Daily records of the operation of the sewage treatment works shall be kept on forms satisfactory to the State Department of Health and copies of such records shall be filed at weekly intervals in the office of the said Department. These reports shall include the quantity of sewage treated and the results of such tests and analyses as the State Department of Health may deem necessary for proper control of the operation of the sewage treatment works.

TWENTY-THREE: The sewage treatment works shall be operated by a competent person or persons. In this connection attention is directed to the necessity for expert advice and supervision over the operation of the sewage treatment works in order to secure efficiency of operation and protection to the waters of the State. To this end the permittee shall place the operation of the sewage treatment works under the control of the designer of these works, or some other person expert in the operation of sewage treatment works, for at least one year after completion thereof.

TWENTY-FOUR: The right to discharge the effluent from the permittee's sewage treatment works into the waters of the State is specifically made contingent upon such operation of these works as will produce an effluent of a quality satisfactory for discharge into the receiving body of water. If, in the opinion of the Sanitary Water Board, these works are not so operated or if by reason of increased load upon the works, changed use or condition of the receiving body of water, or otherwise, the said effluent ceases to be satisfactory for such discharge, then upon notice by the Board the right herein granted to discharge such effluent shall cease and become null and void and, within the time specified by the Board, the permittee shall take such remedial measures as will produce an effluent which in the opinion of the Board, will be satisfactory for discharge into the said receiving body of water.

TWENTY-FIVE: The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air, and to the highly toxic character of certain gases arising from such digestion or from sewage in insufficiently ventilated compartments or sewers. Therefore, at all places throughout the works where hazard of fire, explosion, or danger from toxic gases may occur, the permittee shall post conspicuously proper warnings of a permanent and easily legible character and shall provide for the thorough instruction of all employees concerning the aforesaid hazards and in first aid and emergency methods of meeting such hazards and shall further provide, in a conveniently accessible place, all necessary equipment and material therefor.

TWENTY-SIX: Adequate and assured ventilation shall be provided for all enclosed screen chambers, sewage wells, pump rooms, sludge wells, general control rooms, chlorine control, and digester control rooms, and also for all other compartments in which explosive or dangerous gases or dusts can accumulate and which must be entered periodically for inspection or operation.

TWENTY-SEVEN: Cross connections between a potable water supply and a sewerage system constitute a potential danger to the public health. Therefore, all direct and indirect connections whereby under normal or abnormal conditions the potable water supply may become contaminated from an inferior water supply, from any unit of the sewage treatment works, or by any appurtenance thereof or from any part of a sewerage system, are hereby specifically prohibited. The permittee is further warned against permitting to be made permanent any temporary connection with a potable supply designed to be held in place while being

used for flushing or other purposes, and is also cautioned against the danger of back siphonage through portable hose lines and similar avenues of possible contamination.

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT

5172419

WATER QUALITY MANAGEMENT PERMIT - PART I

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

SEWAGE PERMIT NO. PA 0026671

In compliance with the provisions of the Clean Water Act, 33 U.S.C. 1251 et. seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et. seq.

City of Philadelphia

is hereby authorized to discharge from the Southwest Water Pollution Control Plant, 80th and Penrose Avenue (Point Source 001) and 74 overflow points (Point Sources 002 - 075)

to the receiving waters named Delaware River (Point Source 001); Schuylkill River (Point Sources 002 - 040 and 073 - 075); Cobbs Creek (Point Sources 041 - 072).

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on August 22, 1980.

This permit and the authorization to discharge shall expire at midnight August 22, 1985.

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the standard or special conditions, the standard or special conditions shall apply.
2. Failure to comply with the rules and regulations of the Department or with the terms or conditions of this permit shall void the authority to discharge given to the permittee by this permit.
3. It is required by law that this permit, before becoming operative, shall be recorded in the Office of the Recorder of Deeds for the county wherein the outlet of said sewer system is located.

PERMIT ISSUED

DATE 8-22-80

BY

C.T. Beechwood

TITLE

C.T. Beechwood  
Regional Water Quality Manager

Special Conditions

I. Effluent Limitations

A. The quality of effluent shall be limited at all times as specified in the following final limitations:

Parameter	30 Consecutive Day Period	7 Consecutive Day Period	30 Consecutive Day Period lbs/day kg/day
Biochemical Oxygen Demand (5-day) 89.25	30 mg/l	45 mg/l	21,650
Suspended Solids 76 1/2	30 mg/l	45 mg/l	52,600
Fecal Coliform	200/100 ml		-----
pH	within limits of 6.0-9.0		-----
Arsenic	0.1 mg/l		175
Cadmium	0.02 mg/l		35
Chromium (hexavalent)	0.10 mg/l		175
Copper	0.20 mg/l		350
Lead	0.10 mg/l		175
Mercury	0.01 mg/l		18
Selenium	0.02 mg/l		35
Zinc	0.60 mg/l		1051

- (1) The above averages, other than for fecal coliform bacteria are based on the arithmetic mean of the effluent samples collected during the specified period. The above average for fecal coliform bacteria is the geometric mean of samples collected in the specified period. In addition, the fecal coliform organisms shall not exceed 1000/100ml in more than 10% of samples.
- (2) Other measurements of oxygen demand can be substituted for Biochemical Oxygen Demand (BOD) where the permittee can demonstrate long-term correlation of the method with BOD values. Substitution of such measurements must receive prior approval of the permitting authority.

- (3) Exceeding the 30-day average for BOD<sub>5</sub> loading set forth above shall not constitute a violation of this permit unless the CBOD loading referenced in subparagraph B is also exceeded.

B. The effluent discharged from this facility shall also meet the following final effluent limitations:

- (1) Carbonaceous Oxygen Demand

The arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 37,020 pounds/day.

- (2) Biochemical Oxygen Demand (5-day)

The arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 10.75 percent of respective arithmetic mean of influent samples during the same time period.

- (3) Suspended Solids

The arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 10 percent of respective arithmetic means of influent samples during the same time period.

## 2. Sampling and Analysis Methods

Test procedures for analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Act under which such procedures may be required. These regulations (40 CFR Part 136) were published on October 16, 1973 and were subsequently amended on December 1, 1976.

## 3. Self-Monitoring and Reporting Requirements

The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the discharge. Monitoring data required by this permit shall be summarized on an average monthly basis. Reports of these monthly values are to be submitted quarterly. Quarterly reports will be required for periods beginning on the first day of January, April, July, and October. A discharge Monitoring Report Form (EPA Form T-40), properly completed and signed by the treatment

plant operator in responsible charge, must be submitted within 28 days after the end of each quarterly report period. Notification of the designation of the responsible operator must be submitted to the permitting agency by the permittee within 60 days after effective date of the permit and from time to time thereafter as the operator is replaced. (In case where there is no treatment plant at this time but monitoring is required, such designation is not needed and the report may be signed by the permittee). The discharge Monitoring Report Form must be sent to the offices of the state water pollution control agency and the Regional Office at the following addresses:

Environmental Protection Agency  
Region III  
Director, Enforcement Division  
6th and Walnut Streets  
Philadelphia, Pennsylvania 19106

State Agency  
Pennsylvania Department of  
Environmental Resources  
1875 New Hope Street  
Norristown, Pennsylvania 19401

Delaware River Basin Commission  
P.O. Box 360  
Trenton, New Jersey 08630

All additional reports, notices, or other information required to be submitted to the permit issuing authority shall be submitted to Director, Enforcement Division, at the above address.

The data collected and submitted to meet final monitoring and reporting requirements shall include the following parameters and testing frequencies:

Parameter	Frequency	Type of Sample
Total Flow (mgd)	Continuous	Recorded
BOD <sub>5</sub> (mg/l)	one per day	influent and effluent 24 hour composite
Suspended Solids (mg/l)	one per day	influent and effluent 24 hour composite



Fecal Coliform	one per day	effluent grab
pH	daily	effluent grab
*NH <sub>3</sub> -N, TKN, NO <sub>3</sub> -N, NO <sub>2</sub> -N	one per week	24-hour composite of effluent
As, Cd, Zn, Chromium (hexavalent), Cu, Pb, Mercury, Ag, Selenium	one per month	composite of 30 24-hour composite samples of effluent
*BOD ultimate with recordings of BOD readings at eight times such as 3, 5, 7, 10, 13, 17, 20 and 30 days	two per week	24-hour composite of effluent

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored parameter. The effluent BOD<sub>5</sub> sample shall be collected at a location immediately preceding disinfection. Other effluent samples shall be collected at or as near as possible to the point of discharge.

\*Record average daily flow on actual date of sampling.

4. Effluent Limitations on Pollutants Attributable to Industrial Users

A. Discharge of Pollutants from Industrial Contributors

The permittee shall ensure that the introduction of incompatible pollutants from industrial dischargers will not (a) interfere with the attainment of final

effluent limitations as outlined in Special Condition 1(A) and 1(B) or (b) interfere with the operation or reduce the efficiency of the treatment works. The permittee shall ensure that each industrial discharger complies with all applicable pretreatment regulations now or hereafter promulgated under Section 307 of the Act.

**B. Acquisition and Reporting of Effluent Data from Industries Subject to Pretreatment Regulations**

1. The permittee shall obtain on a routine basis from all contributing industries subject to pretreatment regulation specific information on the quantity and quality of pollutant introduced by each such industry. A description of each industry subject to pretreatment regulations, 40 C.F.R. § 403.8, 43 Fed. Reg. 27736 (June 26, 1978) and any amendments thereto. Information previously submitted under Special Condition (4) of NPDES Permit PA 0026671 issued December 31, 1974, to the extent that the previous information fulfills this requirement and is true and correct, may be incorporated by reference.

2. This information shall be reported to the permit issuing authority on a quarterly basis with the first report due no later than October 30, 1979. Thereafter, quarterly reports reflecting no change from the previous quarter may simply relate this fact, without submitting repetitive data. The permit issuing authority shall be notified immediately of any substantial change in volume or characteristics of pollutants being introduced into the treatment system from an existing industrial source, including any anticipated impact of such change in the quantity or quality of effluent to be discharged from the treatment facility.

3. The permit issuing authority shall also be notified of any new introduction of pollutants to the plant from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging these pollutants.

4. By March 30, 1980, the permittee shall submit approval to the appropriate Approving Authority a pretreatment program which meets the requirements applicable pretreatment regulations including, but limited to, 40 C.F.R. § 403.8 and § 403.9, 43 Fed Reg. 27736 (June 26, 1978) and all amendments thereto. The terms and conditions of this pretreatment program, when approved, shall be enforceable through this permit.

C. Limitations Applicable to Industrial Users

The permittee shall not allow or accept the discharge of pollutants from any industrial source to the municipal sewerage system in excess of any of the following concentrations measured as a total of both soluble and insoluble metals for a composite representing the process day or twice these concentrations at any time as shown by grab sample, unless the discharger has submitted a compliance schedule (to include implementing actions and dates for compliance) approved by the permittee to achieve compliance.

Nickel	10 mg/l	Mercury	0.005 mg/l
Lead	3 mg/l	Arsenic	1.0 mg/l
Zinc	30 mg/l	Silver	5.0 mg/l
Copper	15 mg/l	Cadmium	0.1 mg/l
Total Chromium	15 mg/l		

These limitations will be superseded by any more stringent standards established under Section 307 of the Act or by any other more stringent applicable State regulations.

D. Toxic Pollutant Survey

1. The permittee shall provide an inventory of the pollutants for which standards have been promulgated pursuant to Section 307(a) of the Act, which are present in the discharge from point source 001, and the quantity and quality of each pollutant. The inventory is due within six months of the promulgation of the first standard or set of standards under

Section 307(a). Subsequent inventories are due one year following the initial inventory. To the extent that information which would otherwise be covered in such inventories is supplied pursuant to the monitoring program set forth in Exhibit H of the Consent Decree as agreed between the permittee and the Agency on May 23, 1979, it shall not be required pursuant to this subparagraph.

2. Based on the results of this survey, the permittee shall participate in programs necessary to inventory and identify point source discharges of toxic pollutants to the municipal sewage system.

#### Sewer Systems With Overflows

- A. Point Sources 002 through 075 (listed below) serve as combined sewer reliefs necessitated by stormwater entering the sewer system and exceeding the hydraulic capacity of the sewers and/or the treatment plant and are permitted to discharge only for such reason. This permit presently imposes no specific effluent limitations on these discharges.
- B. Effective immediately, the permittee will implement a program to minimize dry weather overflows. This program shall include regular monitoring of regulator controls within the combined sewer system and prompt repair or replacement of malfunctioning regulator controls. The permittee shall submit this program to EPA and DER within six months of the effective date of this permit. The permittee shall submit a schedule with this program which indicates the order in which inspections of the system will be made and corrective action taken.

Notwithstanding the above, if standards, limitations or treatment techniques for combined sewer overflows are established under the requirements of the Act and such standards, limitations or treatment techniques require more than submission and implementation of the above program, this permit shall be revised or modified in accordance with the standards, limitations or treatment techniques and the permittee shall be so notified.

Schuylkill River

Lower Schuylkill South System

Point Source	Interceptor Regulator Name	Location	
002	Reed St. & Schuylkill Ave.	75°12'18"W	40°56'17"N
003	34th St. & Mifflin Sts.	75°12'25"W	39°55'55"N
004	Vare Avenue & 29th St.	75°12'37"W	39°55'41"N
005	Passyunk Ave. & 29th St.	75°12'5" W	39°55'11"N
006	Passyunk Ave. & 28th St.	75°12'5" W	39°55'11"N
007	26th St. 700' N of Hartranft St.	75°12'13"W	39°54'53"N
008	Penrose Ave. & 26th St.	75°12'40"W	39°53'54"N

Central Schuylkill

East Side System

009	24th St. N. of Powelton Ave.	75°10'49"W	39°57'41"N
010	Wood St. W. of Bonsall St.	75°10'50"W	39°57'39"N
011	Vine St. W. of Bonsall St.	75°10'47"W	39°57'37"N
012	Race St. & Bonsall St.	75°10'45"W	39°57'30"N
013	Arch St. W. of 23rd St.	75°10'46"W	39°57'24"N
014	Market St. 25'E. of 24th St.	75°10'48"W	39°57'16"N
015	Chestnut St. & 24th St.	75°10'50"W	39°57'11"N
016	Sansom St. W. of 24th St.	75°13'52"W	39°57'08"N
017	Walnut St. W. of 24th St.	75°10'54"W	39°57'05"N
018	Locust St. & 25th St.	75°10'56"W	39°57'00"N
019	Spruce St. & 25th St.	75°11'00"W	39°56'57"N
020	Pine St. W. of Taney St.	75°11'06"W	39°56'53"N
021	Lombard St. W. of 27th St.	75°11'09"W	39°56'52"N
022	South St. E. of 27th St.	75°11'12"W	39°56'48"N
023	Schuylkill Ave. & Bainbridge St.	75°11'17"W	39°56'45"N
024	Schuylkill Ave. & Christian St.	75°11'28"W	39°56'36"N
025	Ellsworth St. W. of Schuylkill Ave.	75°11'35"W	39°56'30"N

Central Schuylkill Interceptor

Central Schuylkill West Side Collector System

026	Mantua Ave. & West River Drive	75°11'17"W	39°58'02"N
027	Haverford Ave. & West River Drive	75°11'06"W	39°57'54"N
028	Spring Garden St. W. of Schuylkill Expwy.	75°11'04"W	39°57'53"N
029	Powelton Ave. W. of Schuylkill Expwy.	75°10'56"W	39°57'42"N
030	Market St. in PRR Baggage Rm.	75°10'53"W	39°57'17"N
031	Schuylkill Expwy. & Walnut St. Bridge	75°10'58"W	39°57'06"N
032	440' N.W. of South St. PR property	75°11'12"W	39°56'52"N
033	660' S. of South St. E. of Pennfield	75°11'22"W	39°56'46"N
034	1,060' S. of South St. E. of Pennfield	75°11'26"W	39°56'43"N

Southwest Main Gravity Collector System

<u>Point Source</u>	<u>Interceptor Regulator Name</u>	<u>Location</u>
035	46th St. & Paschall Ave.	75°12'23"W 39°56'31"N
036	43rd St. S.E. of Woodland Ave.	75°12'18"W 39°56'36"N

Lower Schuylkill West Side Collector System

037	49th St. E. of P & R Railroad	75°12'23"W 39°56'14"N
038	51st St. E. of P & R Railroad	75°12'23"W 39°56'08"N
039	56th St. E. of P & R Railroad	75°12'49"W 39°55'43"N
040	67th St. E. of P & R Railroad	75°12'58"W 39°54'29"N

Discharge to Cobbs Creek

Cobbs Creek Lower Level Collector System

041	60th St. & Cobbs Creek Pkwy.	75°14'08"W 39°56'11"N
042	Mount Moriah Cemetary & 62nd St.	75°14'19"W 39°55'57"N
043	65th St. & Cobbs Creek Pkwy.	75°14'39"W 39°55'46"N
044	68th St. & Cobbs Creek Pkwy.	75°15'40"W 39°55'38"N
045	70th St. & Cobbs Creek Pkwy.	75°14'46"W 39°55'27"N
046	Upland St. & Cobbs Creek Pkwy.	75°14'52"W 39°55'14"N
047	Woodland Ave. & Island Ave.	75°14'51"W 39°55'00"N
048	75th St. & Grays Ave.	75°14'55"W 39°54'45"N
049	Claymont St. & Grays Ave.	75°14'55"W 39°54'42"N
050	77th St. & Elmwood Ave.	75°15'02"W 39°54'34"N

Cobbs Creek Upper Level Collector System

051	City Line Ave. & 73rd St.	75°16'04"W 39°58'51"N
052	City Line Ave. 100's. Side of Creek	75°16'02"W 39°58'51"N
053	Malvern Ave. & 69th St.	75°15'28"W 39°58'39"N
054	Lebanon Ave. S.W. of 73rd St.	75°15'26"W 39°58'31"N
055	Lebanon Ave & 69th St.	75°15'26"W 39°58'31"N
056	Lansdowne Ave. & 69th St.	75°15'26"W 39°58'27"N

057	64th St. & Cobbs Creek	75°14'57"W	39°57'52"N
058	Gross St. & Cobbs Creek	75°14'53"W	39°57'50"N
059	Cobbs Creek Pkwy. S. of Market St.	75°14'54"W	39°57'43"N
060	Spruce St. & Cobbs Creek	75°14'59"W	39°57'26"N
061	62nd St. & Cobbs Creek	75°14'57"W	39°56'56"N
062	Baltimore Ave. & Cobbs Creek	75°14'50"W	39°56'44"N
063	59th St. & Cobbs Creek Pkwy.	75°14'26"W	39°56'32"N
064	Thomas Ave. & Cobbs Creek	75°14'22"W	39°56'27"N
065	Beaumont St. & Cobbs Creek	75°14'06"W	39°56'15"N
066	Cobbs Creek Pkwy of City Line Ave.	75°16'50"W	39°28'29"N
067	S. of Brockton Rd. & Farrington Rd.	75°15'55"W	39°38'13"N
068	Woodcrest Ave. & Morris Park	75°15'43"W	39°58'41"N
069	Morris Pk. W. of 72nd St. & Sherwood Rd.	75°15'55"W	39°58'46"N
070	69th St. Woodbine Ave. S. of Brentwood Rd.	75°15'33"W	39°58'49"N
071	Cobbs Creek Pkwy. S. 67th & Callowhill St.	75°15'15"W	39°57'55"N
072	Cobbs Creek Pkwy. & 77th St.	75°16'12"W	39°58'21"N

## Discharges to Schuylkill River

## Lower Schuylkill South System

073	35th & Mifflin Sts.	75°12'25"W	39°55'55"N
074	36th & Mifflin Sts.	75°12'25"W	39°55'55"N

Central Schuylkill East Side System

075 Main Relief Sewer 75°11'01"W 39°58'10"N

## 6. Planning and Management Requirements

The permittee shall monitor at the Philadelphia City boundary, the quantity of essentially all wastewater that is received for treatment from suburban areas. This information shall be recorded as a monthly average for each sampling station and reported quarterly as an attachment to the monitoring reports required under Section (3) of the Special Condition of this permit.

The permittee shall submit an annual report by June 30th of each year as required by 25 PA Code § 94.12. Furthermore, the permittee shall take action to reduce any existing overload as required by 25 PA Code § 94.21 or to prevent a projected overload as required by 25 PA Code § 94.22.

### General Conditions

1. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit, except as provided in Special Condition 1A(3). Such a violation may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act. Facility modifications, additions, and/or expansions that increase the plant capacity must be reported to the permitting authority and this permit will then be modified or re-issued to reflect such changes. Any anticipated change in the facility discharge, including any new significant industrial discharge or significant changes in the quantity or quality of existing industrial discharges to the treatment system that will result in new or increased discharges of pollutants must be reported to the permitting authority. Modifications to the permit may then be made to reflect any necessary changes in permit conditions, including any necessary effluent limitations for any pollutants not identified and limited herein. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.
2. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
  - (a) Violation of any terms or conditions of this permit;
  - (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
  - (c) A change in any condition that requires either temporary interruption or elimination of the permitted discharge; or,
  - (d) Information newly acquired by or submitted to the Agency.



3. Notwithstanding 2 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified.
4. The permittee shall allow the head of the state water pollution control agency, the Regional Administrator, and/or their authorized representatives, upon the presentation of credentials:
  - (a) To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit;
  - (b) To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit;
  - (c) To inspect at reasonable time any monitoring equipment or monitoring method required in this permit; or,
  - (d) To sample at reasonable times any discharge of pollutants.
5. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
6. This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.
7. Except for data determined to be confidential under Section 308 of the Act, all required reports shall be available for public inspection at the offices of the state water pollution control agency and the Regional Administrator. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

8. Facility Operation and Quality Control

All waste collection, control, treatment and disposal facilities shall be operated in a manner consistent with the following:

- (a) At all times, all facilities shall be operated as efficiently as possible in a manner which will minimize upsets and discharges of excessive pollutants.
- (b) The permittee shall provide an adequate operating staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.
- (c) Maintenance of treatment facilities that results in degradation of effluent quality shall be scheduled during non-critical water quality periods and shall be carried out in a manner approved by the permitting authority.

9. The diversion or bypass of any inadequately treated discharge by the permittee is prohibited, except: (1) where unavoidable to prevent personal injury, loss of life or severe property damage; or, (2) where excessive storm drainage of runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall notify the permit issuing authority in writing within 72 hours of when it first determines or should reasonably have determined that such diversion or bypass has taken place and shall supply as a minimum the information requested in General Condition Number 11.

10. Recording

The permittee shall maintain records for all samples; the date and time of sampling, the sampling method used, the date analyses were performed, the identity of the analyst, and the results of all required analyses and measurements.

All sampling and analytical records mentioned in the preceding paragraph shall be retained for a minimum of three years. The permittee shall also retain all original recordings from any continuous monitoring instrumentation, and any calibration and maintenance records, for a minimum of three years. These periods will be extended during the course of any unresolved litigation, or when so requested by the Regional Administrator.

11. Non-compliance with Effluent Limitation

- A. Within fourteen working days of the permittee's knowledge of a failure to meet any effluent limitations specified in this permit, the permittee shall submit a written report to the Director, Enforcement Division, EPA Region III and the Regional Water Quality Manager, PaDER. The report submitted by the permittee shall include a description of the violation and the steps taken and being taken to mitigate the violation and prevent recurrence of the violation. If the permittee cannot, within fourteen working days, determine the cause of the violation and identify such cause in this report, it shall file a supplementary report on the earliest possible date thereafter.
- B. Nothing in this provision shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

12. Solids Disposal

Collected screenings, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into navigable waters or their tributaries.

- 13. Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Act.
- 14. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the state water pollution control agency.
- 15. 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.





NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
DISCHARGE MONITORING REPORT

Form Approved  
OMB NO. 1545-0047

Southwest Water Pollution Control Plant

City of Philadelphia

INSTRUCTIONS

1. Provide dates for period covered by this report in spaces marked "REPORTING PERIOD".
2. Enter reported minimum, average and maximum values under "QUANTITY" and "CONCENTRATION" in the units specified for each parameter as appropriate. Do not enter values in boxes containing asterisks. "AVERAGE" is average computed over actual time discharge is operating. "MAX" and "MINIMUM" are extreme values observed during the reporting period.
3. Specify the number of analyzed samples that exceed the maximum (and/or minimum as appropriate) permit conditions in the columns labeled "No. Ex." If none, enter "0".
4. Specify frequency of analysis for each parameter as No. analyses/No. days (e.g., "3/7" means 3 analyses performed every 7 days.) If continuous enter "CONT."
5. Specify sample type ("grab" or "hr. composite") as applicable. If frequency was continuous enter "NA".
6. Appropriate signature is required on bottom of this form.

18-20 PA ST	14-18 0026671 PERMIT NUMBER	117-101 001 DIS	4592 BIC	75°13'33" LATITUDE	39°52'08" LONGITUDE
REPORTING PERIOD FROM		TO			
120-211 122-221 124-231 YEAR MO DAY		126-271 128-281 130-291 YEAR MO DAY			

PARAMETER		(3 card only) QUANTITY 120-491				(4 card only) CONCENTRATION 126-631 128-641				FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		MINIMUM	30-DAY AVERAGE	MAXIMUM	UNITS	NO. EX	MINIMUM	30-DAY AVERAGE	7-DAY AVERAGE			
ARSENIC	REPORTED											
	PERMIT CONDITION	***	175	***	LB/DAY		***	0.10	***	MG/L	1/30	30- hr
CADMIUM	REPORTED											
	PERMIT CONDITION	***	35	***	LB/DAY		***	0.02	***	MG/L	1/30	30- hr
(HEXAVALENT) CHROMIUM	REPORTED											
	PERMIT CONDITION	***	175	***	LB/DAY		***	0.10	***	MG/L	1/30	30- hr
COPPER	REPORTED											
	PERMIT CONDITION	***	350	***	LB/DAY		***	0.20	***	MG/L	1/30	30- hr
LEAD	REPORTED											
	PERMIT CONDITION	***	175	***	LB/DAY		***	0.10	***	MG/L	1/30	30- hr
MERCURY	REPORTED											
	PERMIT CONDITION	***	18	***	LB/DAY		***	0.01	***	MG/L	1/30	30- hr
SELENIUM	REPORTED											
	PERMIT CONDITION	***	35	***	LB/DAY		***	0.02	***	MG/L	1/30	30- hr
ZINC	REPORTED											
	PERMIT CONDITION	***	1051	***	LB/DAY		***	0.60	***	MG/L	1/30	30- hr
NAME OF PRINCIPAL EXECUTIVE OFFICER		TITLE OF THE OFFICER				DATE						
LAST FIRST MI		TITLE				YEAR MO DAY				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.