

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FIELD OPERATIONS - BUREAU OF AIR QUALITY

OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source(s) described below:

Permit No.	<u>OP-23-0032</u>	Source(s)	<u>Facility VOC & NOx Sources</u>
Owner	<u>DELCORA WRTP</u>	Air	<u></u>
Address	<u>100 East Fifth Street</u>	Cleaning	<u></u>
	<u>City of Chester, PA 19016</u>	Device	<u></u>
Attention	<u>Nicholas F. Catania</u>	Location	<u>100 East Fifth Street</u>
	<u>Executive Director</u>		<u>City of Chester</u>
			<u>Delaware County</u>

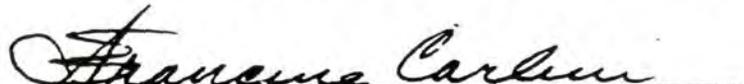
This permit is subject to the following conditions:

1. That the source(s) and any associated air cleaning devices are to be:
 - a. operated in such a manner as not to cause air pollution;
 - b. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner named above.

(SEE ADDITIONAL CONDITIONS ATTACHED)

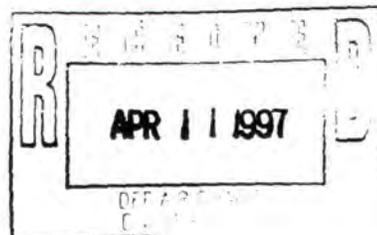
Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued 03/12/1997


Francine Carlini
Regional Manager
Air Quality

Expires 03/12/2002

cc: Division of Permits, RCSOB
Administration
SEFO
Re 30 (RN)260-14



OPERATING PERMIT CONDITIONS

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(REVISED 05/16/97)

CONDITIONS (continued):

3. This Operating Permit incorporates Reasonably Available Control Technology (RACT) determinations as required by Title I provisions of the Clean Air Act Amendments and 25 Pa. Code Section 129.91 through 129.95 for:

Wastewater treatment sources:

- Two Grit/Preparation tanks
- Influent Flume
- Primary Settling Tank Effluent Weirs
- Four Aeration Tanks
- Eight Primary Settling Tanks
- Aeration Tank Effluent Weirs
- Five Final Clarifier Tanks
- Final Clarifier Effluent Weirs
- Two Post Aeration and two Chlorine Contact Tanks
- Contact Tank Effluent Weir
- Plant Effluent (outfall) Channels and Weirs

Sludge disposal sources:

- Dissolved Air Floatation
- Dewatering Operation
- Two Multiple Hearth Incinerators (MHIs)

Space heating sources:

- Two 1.02 MMBtu/hr No. 2 oil-fired boilers
- Two 1.34 MMBtu/hr No. 2 oil-fired boilers

Storage Tanks:

- Three 20,000 gallons capacity No. 2 fuel storage tanks
- Two 2,000 gallons capacity unleaded gasoline storage tanks

4. This RACT Operating Permit supersedes the Operating Permit No. 23-301-084 and incorporates the NO_x/VOC Reasonably Available Control Technology (RACT) requirements of 25 PA Code Section 129.91-95.

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CONDITIONS (continued):

5. The expiration date shown on the Operating Permit is for state purposes. For Federal enforcement purposes the RACT provisions of the Operating Permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51 and approved by the U.S. Environmental Protection Agency (EPA). ~~The Operating Permit shall become enforceable by the U.S. EPA upon its approval of the above as a revision to the SIP.~~
6. The potential to emit volatile organic compounds from each of the following sources or source categories shall never exceed 3 pounds per hour, 15 pounds per day or 2.7 tons per year (as determined by the Department). Should any of these limitations ever be exceeded for any of the source categories listed below, a detailed RACT analysis which meets the criteria specified in Section 129.92 of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection must be submitted to the Department for each source contained in the respective source category.
- Eight Primary Settling Tanks
 - Aeration Tank Effluent Weir
 - Five Final Clarifier Tanks
 - Final Clarifier Effluent Weirs
 - Two Post Aeration and two Chlorine Contact Tanks
 - Contact Tank Effluent Weir
 - Plant Effluent (outfall) Channels and Weirs
 - Dissolved Air Floatation
 - Dewatering Operation
 - Two 1.02 MMBtu/hr No. 2 oil-fired boilers
 - Two 1.34 MMBtu/hr No. 2 oil-fired boilers
 - Three 20,000 gallons capacity No. 2 fuel storage tanks
 - Two 2,000 gallons capacity unleaded gasoline storage tanks
7. Pursuant to the RACT provisions of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, each Multiple Hearth Incinerator unit shall not emit nitrogen oxides (NO_x) and total hydrocarbon compounds (THC) at a rate in excess of 15.0 pounds per hour (lbs/hr) and 100 parts per million (PPM) corrected at seven percent oxygen and zero percent moisture respectively.

The Department reserves the right to revise and make more stringent the emission limits established above based on actual stack test results.

8. The total hydrocarbon compounds shall be monitored and recorded.

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CONDITIONS (continued):

9. Pursuant to the RACT provisions of Chapter 129 of Article III of the Rules and Regulations of the Department of Environmental Protection, the total volatile organic compounds (VOC) emissions from the following sources shall not exceed more than 140 tons per year. Compliance with these limitations for the following wastewater treatment sources shall be determined based on EPA's Method 624 and "Water 8" Computer Program.
- Grit/Preparation tanks
 - Influent Flume
 - Primary Settling Tank Effluent Weirs
 - Aeration Tanks
 - Primary Settling Tanks
 - Aeration Tank Effluent Weirs
 - Final Clarifier Tanks
 - Final Tank Effluent Weirs
 - Chlorine Contact Tanks
 - Post Aeration and Contact Tank Effluent Weirs
 - Plant Effluent (outfall) Channels and Weirs
 - Dissolved Air Floatation
 - Dewatering Operation
10. The RACT requirements for the sources addressed in condition No. 6 is as follows:
- These sources shall be maintained and operated in accordance with manufacturers' specifications as well as in accordance with good air pollution control practices.
11. If any time the permittee causes, permits or allows any modification (as that term is defined in Chapter 121 of Title 25, the Rules and Regulations of the Department of Environmental Protection of the aforementioned air contamination source(s), the operation and use of which is authorized by this permit, the permit shall be suspended, and the permittee shall not thereafter continue to operate or use said air contamination source(s).
12. A record shall be kept of all by-pass stack openings, malfunctions and any process upsets or changes that increase emissions of particulate matter and/or malodors to the outdoor atmosphere. These records shall explain the causes of all such malfunctions/process upsets and the corrective actions taken by the Authority. All records shall be kept for a minimum of 2 years and be made available for the Department's review upon request.

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CONDITIONS (continued):

13. The dry solids feed to each incinerator shall be limited to 48 tons per day. The sludge feed rates to each incinerator (dry basis) shall be monitored and recorded daily by DELCORA. All records shall be kept for a minimum of 2 years and be made available for the Department's review upon request.
14. The mercury content of the dry sludge shall be determined at least once per calendar year using the sampling/test methods described in 40 CFR, Part 61, Section 61.54, Subpart E (i.e. the Federal NESHAP regulations). Sample results shall be submitted to the Department's Southeast Regional Office and the U.S. Environmental Protection Agency's Region III Office in Philadelphia, PA within 10 days of the results becoming available to DELCORA.
15. The pressure drop (ΔP) across the throat of each venturi scrubber shall be maintained at a minimum of 22.5" w.g. at all times. The total ΔP across the entire scrubbing system shall be maintained at a minimum of 30.0" w.g. at all times. Instrumentation shall be provided by DELCORA to continuously monitor these pressure drops so that they can be checked by the Department at any time.
16. The following water flow rates, at a minimum, shall be maintained to each of the scrubbing system components:
 - a. to main inlet-575 GPM @ 5 psig
 - b. to venturi-115 GPM @ 20 psig
 - c. to weir-10 GPM @ 20 psig
 - d. to quench sprays-35 GPM @ 20 psig

Instrumentation shall be provided by DELCORA to continuously monitor these flow rates so that they can be checked by the Department at any time.

17. The maximum heat release for each incinerator shall not exceed 43.4×10^6 BTU/hr.
18. The operation of the air contamination sources identified in condition 3 herein shall not at any time result in the emission of air contaminants in excess of the limitations specified in any condition contained herein or specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection.

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(REVISED 05/16/97)

CONDITIONS (continued):

19. Recordkeeping Requirements:
 - A. DELCORA shall keep daily record of influent and effluent wastewater flow and associated parameters required to estimate VOC emissions from the wastewater treatment sources using EPA Method 624 analyses for each source category. On an annual basis, DELCORA shall calculate VOC emissions from the wastewater treatment sources listed in Condition 6 using an average wastewater influent flow (averaged over the previous 12 months) and the average influent VOC concentration (as obtained from the monthly EPA Method 624 analyses and also averaged over the previous 12 months).
 - B. The records shall be retained for at least 2 years and shall be made available to the Department upon request.
 - C. DELCORA shall maintain comprehensive, accurate records of any additional data as required in accordance with 25 Pa. Code 129.95.
20. DELCORA, within one (1) hour of occurrence, shall notify the Department of Environmental Protection, at 610-832-6241, of any malfunction of the source(s) or associated air cleaning device(s) which results in, or may possibly be resulting in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection. A written report shall be submitted to the Department within five (5) working days following the incident describing the malfunctions and corrective actions taken.
21. If at any time the Department has cause to believe that air contaminant emissions from the aforementioned source(s) may be in excess of the limitations specified in any condition contained herein or specified in, or established pursuant to, any applicable rule or regulation contained in Article III of the Rules and Regulations of the Department of Environmental Protection, the company shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s). Such testing shall be conducted in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

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CONDITIONS (continued):

22. Any notification required as a result of any condition herein should be directed to:

Regional Manager
Air Quality Program
Lee Park-Suite 6010
555 North Lane
Conshohocken, PA 19428
Telephone: 610-832-6242

Re 30 (RN)260-15

