

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
WATER POLLUTION CONTROL PERMIT

B

LOG NUMBERS: 0365-04

PERMIT NO.: 2004-AO-0365

FINAL PLANS, SPECIFICATIONS, APPLICATION
AND SUPPORTING DOCUMENTS

DATE ISSUED: MAR 22 2004

PREPARED BY: Robert H. Anderson & Associates

SUBJECT: WASCO SANITARY DISTRICT - Sewage Treatment Plant and Spray Irrigation Facilities

PERMITTEE TO OWN AND OPERATE

Wasco Sanitary District
Post Office Box 9
Wasco, Illinois 60183

RECEIVED
MAR 26 2004

Div. Water Pollution Control
Field Operations Section
Reg. 2

Permit is hereby granted to the above designated permittee to operate water pollution control facilities described as follows:

A Influent Pumping Station and Sewage Treatment Facility:

An influent pump station equipped with 3 submersible pumps and a rated capacity of 725 gpm at 70 feet TDH (each pump rated at 590 gpm at 57 feet TDH), and 390 feet of 8 inch force main. A wastewater treatment facility consisting of a 2 cell aerated lagoon and a storage lagoon with intermittent sand filters, a sodium hypochloride disinfection system followed by a filtered effluent storage basin and three irrigation systems. The first cell contains 1,074,400 feet³, the second cell has 447,666 feet³, the storage cell has 5,069,530 feet³, and the intermittent sand filters provides for 4 beds of 9,039 feet² each. The filtered effluent storage basin has a capacity of 398,400 gallons. Upon completion of the permitted improvements, the Wasco Sanitary District treatment facility will have a design capacity of 3160 PE with a design average flow of 316,000 gallons per day.

B Irrigation System:

1. A stationary irrigation system adjacent to the wastewater treatment facility consisting of fixed sprinklers for land application of wastewater effluent on approximately 26.5 acres. The irrigation system is fed by a 400 gpm vertical turbine pump located at irrigation Pump Station Number 1.
2. A center pivot irrigation system adjacent to the wastewater treatment facility for land application of wastewater effluent on approximately 34.0 acres. This system will operate in a circle with a radius of approximately 686 feet. The center pivot system is fed by a 400 gpm vertical turbine pump located at irrigation Pump Station Number 1.
3. A remote stationary irrigation system consisting of fixed head sprinklers for land application of wastewater on approximately 32 acres. The system consists of a transfer pump station located at the wastewater treatment facility equipped with 2 submersible pumps each rated at 330 gpm at 51 feet TDH and 9424 feet of 8 inch forcemain. The irrigation system is fed by Irrigation Pump Station Number 2, which consists of 2 vertical turbine pumps each rated at 200 gpm at 244 feet TDH.

THE STANDARD CONDITIONS OF ISSUANCE INDICATED ON THE REVERSE SIDE MUST BE COMPLIED WITH IN FULL. READ ALL CONDITIONS CAREFULLY.

ELN
SAK:ELN:036504.wpd

DIVISION OF WATER POLLUTION CONTROL

EPA - Des Plaines FOS
Robert H. Anderson & Associates
Records - Municipal
Binds

Alan Keller
Alan Keller, P.E.
Manager, Permit Section

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This permit renews and replaces Permit Number 1999-AB-4294 which was previously issued for the herein permitted facilities. This Permit is issued subject to the following Special Condition(s). If such Special Condition(s) require(s) additional or revised facilities, satisfactory engineering plan documents must be submitted to this Agency for review and approval for issuance of a Supplemental Permit.

SPECIAL CONDITION 1. The completion of construction of the project permitted by permit number 1999-AB-4294 and the supplemental permits thereto must be approved by Agency personnel prior to the issuance of future sanitary sewer permits.

SPECIAL CONDITION 2. The operational portion of this permit expires on February 28, 2009, and is subject to renewal at that time.

SPECIAL CONDITION 3. This permit is issued with the expressed understanding that there shall be no surface discharge from these facilities. Should any such discharge be anticipated, the permittee shall apply for an NPDES permit at least 180 days prior to such discharge.

SPECIAL CONDITION 4. The spray irrigation system cannot be operated when the water table in the irrigation area is within 4 feet of the soil surface. A 4 foot layer of soil or more must be maintained in an aerobic condition prior to spray irrigation. Groundwater monitoring wells must be monitored at the beginning of each irrigation week and the groundwater levels recorded.

SPECIAL CONDITION 5. An irrigation area with drainage tile cannot be operated when the water table is above the invert of the irrigation tile unless the crown of the tile is at least 4 feet from the soil surface.

SPECIAL CONDITION 6. Storage of effluent must be provided when groundwater or saturated soil conditions do not permit infiltration.

SPECIAL CONDITION 7. The spray irrigation system shall be operated at an average weekly application rate of 1.50 inches per week. The following maximum rates depending upon climatic conditions:

- Maximum hour - 0.25 inches
- Maximum day - 1.0 inches
- Maximum week - 3.0 inches

Precipitation received during the 24 hour period prior to irrigation shall be subtracted from the 1.0 inch maximum day rate to determine the maximum day application rate that can be applied.

SPECIAL CONDITION 8.

Treated wastewater shall be applied to sites within the following guidelines:

- It shall not be applied to sites during precipitation.
- It shall not be applied to sites which are saturated or with ponded water.
- It shall not be applied to ice or snow covered sites or when the ground is frozen.
- It shall not be applied when winds exceed 22 mph.

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It is recommended that treated wastewater not be applied to the site when precipitation is imminent.

SPECIAL CONDITION 9. The following monitoring is required:

<u>Parameter</u>	<u>Data</u>	<u>Sample Frequency</u>
Influent Flow	Monthly Avg., Daily Max (mgd)	Continuous
Lagoons	Water Level	Weekly
Groundwater		
1 Nitrate	conc. (mg/l)	Quarterly
2 Nitrite	conc. (mg/l)	Quarterly
3 NH ₃ -N	conc. (mg/l)	Quarterly
4 Chloride	conc. (mg/l)	Quarterly
Sulfate	conc. (mg/l)	Quarterly
pH	units	Quarterly
Total Dissolved Solids	conc. (mg/l)	Quarterly
Wastewater Effluent Applied to Land	inches/day	Quarterly
Chlorine Residual of Wastewater Effluent Applied to Land	conc. (mg/l)	Daily
		Quarterly

Quarterly reports shall be submitted to:

Manager, Region 2
 Field Operations Section, DWPC
 Illinois Environmental Protection Agency
 Eisenhower Building, Suite 600
 1701 South First Avenue
 Maywood, Illinois 60153

Reports should be received by January 15, April 15, July 15 and October 15 each year.

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A copy shall also be submitted to:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276