

FACT SHEET

PERMITTEE/FACILITY NAME: City of Saline / Saline Wastewater Treatment Plant

COUNTY: WASHTENAW

DESCRIPTION OF EXISTING WASTEWATER TREATMENT FACILITIES

Wastewater enters the influent wet well and is pumped to the grit chamber. The treatment process begins with grit removal followed by primary treatment. During primary treatment the flow is split into two primary tanks where ferric chloride and polymer are added to aid in sedimentation. Secondary treatment consists of two trains of nine rotating biological contactors (RBCs). Each train consists of two units which remove biochemical oxygen demand, followed by seven units which remove ammonia nitrogen. Following the RBCs, additional ferric chloride and polymer are added to two secondary clarifiers. In the last stage of treatment, flow passes through rapid sand filters followed by ultraviolet light disinfection.

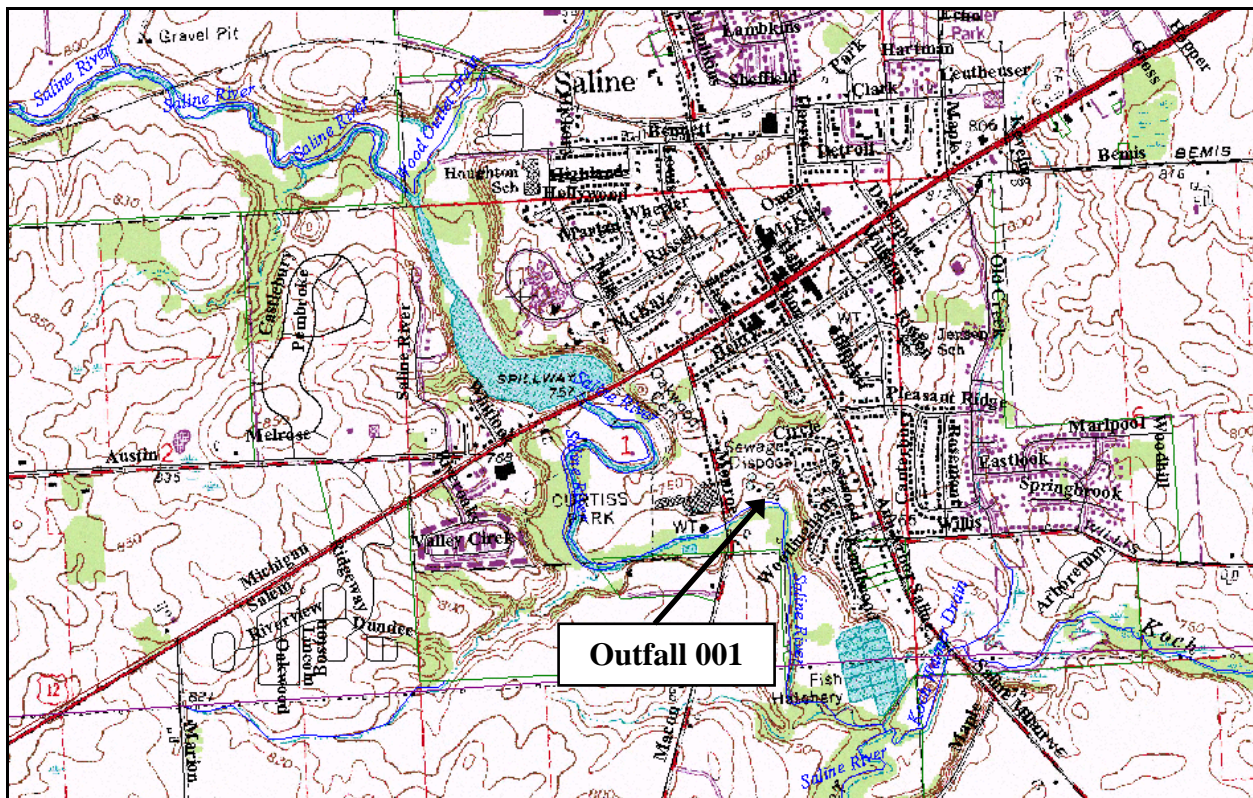
Residual treatment and handling consists of anaerobic digestion, settling of digested sludge in sludge storage tanks, and land application.

MAP OF DISCHARGE LOCATION

Facility Public Land Survey System Coordinates:

NW1/4, SE1/4, Section 1, T4S, R5E

Saline Township, **WASHTENAW COUNTY**



RECEIVING WATER

The Saline River is protected for agricultural uses, navigation, industrial water supply, public water supply in areas with designated public water supply intakes, warm-water fish, other indigenous aquatic life and wildlife, partial body contact recreation, total body contact recreation (May through October), and fish consumption.

The receiving stream flows used to develop effluent limitations are a 95 percent exceedance flow of 4.8 cfs, a harmonic mean flow of 19 cfs, and a 90-day, 10-year low flow of 7.6 cfs.

MIXING ZONE

For toxic pollutants, the volume of the Saline River used in assuring that effluent limitations are sufficiently stringent to meet Water Quality Standards is 25 percent of the applicable design flow of the receiving stream.

For other pollutants, the volume of the Saline River used in assuring that effluent limitations are sufficiently stringent to meet Water Quality Standards is the applicable design flow of the receiving stream.

EXISTING EFFLUENT QUALITY: (from DMR data from October 1, 2008 to September 30, 2009)

<u>Parameter</u>	<u>Minimum Daily</u>	<u>Maximum Monthly</u>	<u>Maximum 7-day</u>	<u>Maximum Daily</u>	<u>Units</u>
Flow	---	1.64	---	4.06	MGD
Carbonaceous Biochemical Oxygen Demand 5-Day (CBOD ₅)	---	6	---	7.7	mg/l
Total Suspended Solids (TSS)	---	18	35	---	mg/l
Ammonia Nitrogen	---	1.2	---	2.92	mg/l
Total Phosphorus	---	0.9	---	---	mg/l
Fecal Coliform Bacteria	---	224	450	---	cts/100 ml
Total Residual Chlorine	---	---	---	0	mg/l
Total Vanadium	---	---	---	0	µg/l
Total Boron	---	---	---	230	µg/l
Available Cyanide	---	---	---	11	µg/l
Total Selenium	---	---	---	2	µg/l
Total Dissolved Solids	---	814	---	960	mg/l
Chloride	---	---	---	262	mg/l
Sulfate	---	---	---	57	mg/l
Total Mercury	---	---	---	11.6	ng/l
pH	6.8	---	---	7.8	SU
Dissolved Oxygen	6.5	---	---	---	mg/l
CBOD ₅ percent removal	97.5	---	---	---	%
TSS percent removal	87.9	---	---	---	%

PROPOSED EFFLUENT LIMITATIONS: (see draft permit)

BASIS FOR PROPOSED EFFLUENT LIMITATIONS

Based on this facility's application for an NPDES discharge permit, the Michigan Department of Natural Resources and Environment (Department) proposes to issue the applicant a permit to discharge, subject to effluent limitations and certain other conditions within the permit. Effluent limitations for CBOD₅ (May through November), ammonia nitrogen, fecal coliform bacteria, total phosphorus, total mercury, pH, available cyanide, whole effluent toxicity, and dissolved oxygen and effluent monitoring for total dissolved solids, chloride, and sulfate are based on water quality. Effluent limits during the months of December through April for CBOD₅, TSS, and the associated percent removal requirements are based on secondary treatment standards. Effluent limits for TSS during the months of May through November and the monitoring requirement for flow are based on permit writer's judgment.

REGISTER OF INTERESTED PERSONS

Any person interested in a particular application, or group of applications, may leave his/her name, address, and telephone number as part of the file for an application. The list of names will be maintained as a means for persons with an interest in an application to contact others with similar interests.

PUBLIC COMMENT

Comments or objections to the draft permit received between February 26, 2010, and March 29, 2010, will be considered in the final decision to issue the permit.

If submitted comments indicate significant public interest in the application or if useful information may be produced, the Department, at its discretion, may hold a public hearing on the application. Any person may request the Department to hold a public hearing on the application. The request should include specific reasons for the request, indicating which portions of the application or draft permit constitute the need for a hearing.

Public notice of a hearing will be provided at least thirty (30) days in advance. The hearing will normally be held in the vicinity of the discharge. The Department will consider comments made at the hearing when making its final determinations on the permit. Further information regarding the draft permit, and procedures for commenting or requesting a public hearing may be obtained by contacting Judith J. Woodcock, Permits Section, Water Bureau, Department of Natural Resources and Environment, P.O. Box 30273, Lansing, Michigan 48909, telephone: 517-373-1329, e-mail: woodcockj@michigan.gov.