# FACT SHEET

# PERMITTEE/FACILITY NAME: Pall Corporation / Pall Life Sciences

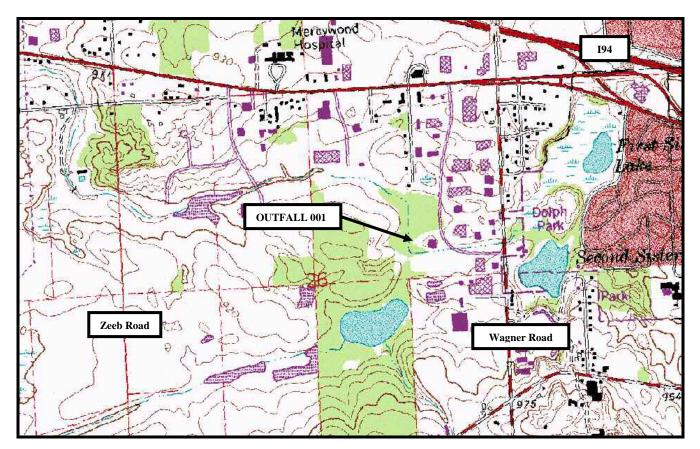
# COUNTY: WASHTENAW

# DESCRIPTION OF EXISTING WASTEWATER TREATMENT FACILITIES

The process used for mineralization of the pollutant of concern, 1,4-dioxane, is based on an ozone/hydrogen peroxide  $(O_3/H_2O_2)$  treatment technology. The treatment system consists of four  $O_3/H_2O_2$  units with a combined capacity to treat up to the maximum volume authorized in the permit. The ozone generators are supplied with oxygen gas by an onsite liquid tank and evaporator system. Ozone is administered into the water stream through a series of injectors. Hydrogen peroxide is introduced through injector quills to the contaminated groundwater, causing an oxidation reaction which destroys the organic pollutants. Prior to discharge a sodium bisulfite chemical feed system is used to assure compliance with the effluent limitation for hydrogen peroxide.

# MAP OF DISCHARGE LOCATION

Facility Public Land Survey System Coordinates: NE1/4, SE1/4, Section 26, T2 S, R5 E Scio Township, **WASHTENAW COUNTY** 



# **RECEIVING WATER**

The unnamed tributary of Honey Creek 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.

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The receiving stream flows used to develop effluent limitations are a 95 percent exceedance flow of 0.0 cfs.

#### MIXING ZONE

For toxic pollutants, the volume of the unnamed tributary of Honey Creek 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 unnamed tributary of Honey Creek used in assuring that effluent limitations are sufficiently stringent to meet Water Quality Standards is the applicable design flow of the receiving stream.

For 1,4-dioxane, there is no mixing zone for this pollutant in the discharge because the concentration of this pollutant in the discharge is better than Water Quality Standards.

Parameter 1,4-dioxane (influent)	Minimum <u>Daily</u> 	Maximum <u>Monthly</u> 	Maximum <u>7-day</u> 	Maximum <u>Daily</u> 0.823	<u>Units</u> mg/l
Flow		1.697		1.738	MGD
1,4-dioxane		6		10	ug/l
Bromate		7		8	ug/l
Hydrogen Peroxide				100	ug/l
Chronic Toxicity				< 1.0	$TU_C$
Oxalic Acid				0*	ug/l
Sodium Bisulfite Dose Rate	e			63	mg/l
рН	6.5			6.8	S.U.

EXISTING EFFLUENT QUALITY: (from DMR data from January 2008 to December 2009)

\*Below the quantification level.

# PROPOSED EFFLUENT LIMITATIONS: (see draft permit)

# BASIS FOR PROPOSED EFFLUENT LIMITATIONS

Based on this facility's application for an NPDES discharge permit, the Department of Natural Resources and Environment (Department) proposes to reissue the applicant a permit to discharge, subject to effluent limitations and certain other conditions within the permit. Effluent limitations for

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1,4-dioxane and bromate are based on the best professional judgment of the level achievable based on the capability of the treatment system. Effluent limitations for hydrogen peroxide and pH are based on water quality standards. The monitoring requirements for 1,4-dioxane at the influent, flow, sodium bisulfite dose rate, equipment inspection, and outfall observation are based on the 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 <u>April 2, 2010</u>, and <u>May 3, 2010</u>, 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 Alvin Lam, Permits Section, Water Bureau, Department of Natural Resources and Environment, P.O. Box 30273, Lansing, Michigan 48909, telephone: 517-335-4132, e-mail: lama@michigan.gov.