Sewer Acct.#: **1011728100**

Company: **SPECGX LLC**

Address: **3600 N 2nd St**

City: **St. Louis**

State and Zip: **MO 63147**

Industry ID	File Code	File Description
35340	40	PERMIT

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

December 22, 2017

Brett Shank, EHS Manager
SPECGX LLC
3600 N. Second Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 – 3
For premise at: 3600 N Second Street, 63147

Dear Mr. Shank:

The Metropolitan St. Louis Sewer District has developed an Industrial Wastewater Discharge Permit for the above premise. Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include:

- New permit application received due to name and ownership change
- Added new Sample Point (SP) 939, including self-monitoring and special conditions
- At SP 905, mass discharge limits have been reduced due to a reduction in flowrate (approximately fourteen percent for the flowrate and for each pollutant)

The previous permit, effective June 01, 2015, is voided as of the effective date of the enclosed permit. You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The first report due date, for this reissued permit, is based on a complete calendar quarter monitoring period. The permittee remains responsible for reporting for the preceding calendar quarter under the previous permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals. Instructions for completing the report form also are enclosed with this letter.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the permit.

Please be aware that an annual permit fee will be added to your monthly sewer bill, or you will receive a separate bill, to cover administrative costs associated with the permit, as provided for under MSD ordinance 12413. The fee is normally added to the last bill of each calendar year, or shortly thereafter.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SMRehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Industrial Wastewater Discharge Permit,
Self-monitoring Report Form, Self-monitoring Report Instructions

cc: Doug Mendoza
Mike Kynion

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 - 3

EFFECTIVE DATE: December 01, 2017
EXPIRATION DATE: November 30, 2022

ISSUED TO: SPECGX LLC
3600 N 2nd St
St. Louis, MO 63147

SIC NUMBER(S): 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 21
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938, 939

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): Sanitary, Storm water

WASTEWATER SOURCE AND CATEGORY: 1,000

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 20,327

WASTEWATER SOURCE AND CATEGORY: Sanitary, Non-categorical Process, Lab wastewater, flow from offsite (009), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	*****	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [deg C]	*****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	*****	Daily Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,000

WASTEWATER SOURCE AND CATEGORY: Non-contact cooling water, Lab wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of storage pad T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency bypass (pump station), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 7,700

WASTEWATER SOURCE AND CATEGORY: Flow from offsite (W of Broadway), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	*****	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [deg C]	*****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	*****	Daily Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 426,206

WASTEWATER SOURCE AND CATEGORY: Categorical (from 905, 912, 915, 920, 927, 930, 933, 936, 937, 938, 939); Sanitary, Non-contact cooling water, Plant & Equipment Washdown, Boiler blowdown, Regen/Reject water, Lab wastewater, Kitchen wastewater, Process wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand[mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	****	Daily Avg	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Cyanide Amenable to Chlorination [mg/L]	1.2	Instant	Once/3 mo
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency bypass (overflow from Plant 5), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C, PSES), Lab wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 4,927

WASTEWATER SOURCE AND CATEGORY: Sanitary, Non-categorical process, Lab wastewater, flow from offsite (SP009), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 52,001

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	156	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	39	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	12	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	4	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	12	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	4	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	12	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	4	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	25	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	6	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	156	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	113	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	35	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	156	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	39	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	156	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	75	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	75	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	13	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	45	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	113	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	32	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	15	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	55	Daily Max	Once/3 mo
Acenaphthene [g/Day]	4	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	9	Daily Max	Once/3 mo
Anthracene [g/Day]	4	Monthly Avg	Once/3 mo
Anthracene [g/Day]	9	Daily Max	Once/3 mo
Benzene [g/Day]	11	Monthly Avg	Once/3 mo
Benzene [g/Day]	26	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	19	Monthly Avg	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	51	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Carbon Tetrachloride [g/Day]	28	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	75	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	75	Daily Max	Once/3 mo
Chloroethane [g/Day]	22	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	58	Daily Max	Once/3 mo
Chloroform [g/Day]	22	Monthly Avg	Once/3 mo
Chloroform [g/Day]	64	Daily Max	Once/3 mo
Chloromethane [g/Day]	22	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	58	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	22	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	9	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	9	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	28	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	75	Daily Max	Once/3 mo
Fluoranthene [g/Day]	11	Daily Max	Once/3 mo
Fluoranthene [g/Day]	4	Monthly Avg	Once/3 mo
Fluorene [g/Day]	4	Monthly Avg	Once/3 mo
Fluorene [g/Day]	9	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	156	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	28	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	75	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	156	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	39	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	33	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	7	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	4	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	9	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	1260	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	440	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	4	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	9	Daily Max	Once/3 mo
Pyrene [g/Day]	4	Monthly Avg	Once/3 mo
Pyrene [g/Day]	9	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	32	Daily Max	Once/3 mo
Toluene [g/Day]	15	Daily Max	Once/3 mo
Toluene [g/Day]	6	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	13	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	14	Daily Max	Once/3 mo
Trichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	19	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	34	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 66,665

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from Bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	5459	Daily Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Avg	Once/mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of bldg 6

AVERAGE WASTEWATER FLOW (GPD): 500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Ammonia (as N) [mg/L]	****	Daily Avg	Once/3 mo
Temperature	****	Daily Avg	Once/3 mo
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	****	Daily Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	30	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	30	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of bldg 512

AVERAGE WASTEWATER FLOW (GPD): 21,600

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in bldg 6

AVERAGE WASTEWATER FLOW (GPD): 500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/year
Methylene Chloride [mg/L]	3.0	Daily Max	Once/year
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/year
Acetone [mg/L]	8.2	Monthly Avg	Once/year
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/year
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/year
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/year
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260

AVERAGE WASTEWATER FLOW (GPD): 7,929

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethyl amine [mg/L]	100	Monthly Avg	Once/year
Diethyl amine [mg/L]	255	Daily Max	Once/year
Triethyl amine [mg/L]	100	Monthly Avg	Once/year
Triethyl amine [mg/L]	255	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of bldg 501

AVERAGE WASTEWATER FLOW (GPD): 37,400

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 40

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 939

SAMPLING POINT LOCATION: Valve from T-700 and T-710, inside bldg 504

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethyl amine [mg/L]	100	Monthly Avg	Once/year
Diethyl amine [mg/L]	255	Daily Max	Once/year
Triethyl amine [mg/L]	100	Monthly Avg	Once/year
Triethyl amine [mg/L]	255	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by January 28, 2018. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. SPECIAL BILLING REPORTING REQUIREMENTS

A.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Wastewater User Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on ninety-six (96) percent of the used water (on an annual basis) being discharged to the District from account number 118821. The permittee shall notify the District's Division of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

A.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Wastewater User Charge Ordinances, the permittee is currently subject to extra-strength surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and/or Total Suspended Solids (TSS). The permittee's current surcharge billing values are: 467 mg/l for BOD; 926 mg/l for COD; and 49 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

B. PROHIBITED DISCHARGES

B.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point 905. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point 905.

C. DERIVATION OF LIMITATIONS

C.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

D. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

D.1. No Monitoring When Influenced by Storm Runoff

Sampling points 003, 008, 009, 010, 011, 080, and 099 may, at times, convey storm water in addition to wastewater regulated by this permit. The self-monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

D.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point 009 and "downstream" sampling point 003. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point 099. Permittee shall perform monitoring at both 009 and 003 within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at 099, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate UF = upstream flow rate
DC = downstream concentration UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

D.3. Special Sampling & Analytical Procedure – SP 008, 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.4. Special Sampling & Analytical Procedure – SP 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.5. Special Sampling & Analytical Procedure – SP 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

D.6. Special Sampling & Analytical Procedure – SP 080, 936, 939

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points 080, 936, and 939; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

E. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

E.1. Sampling Not Required at Non-Toxic / Low-Flow Point

The permittee is not required to sample discharges at sampling points 001 and 002, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

E.2. Sampling Not Required at Connections with NO Sample Point and with Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

E.3. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

E.4. Certification of No Cyanide Under 439 - SP 080, 915, 936, 939

The permittee has determined in report dated August 23, 2017, and May 17, 2015, that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points 080, 915, 936, and 939. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

E.5. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3

1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

E.6. Report Results Under Mass Discharge Limits – SP 905

The limitations at sampling point 905 are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

E.7. Special Certification & Reporting Requirement - SP 930, 933, 936, 939

For sampling points 930, 933, 936 and 939 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, 936, and 939 are adhered to.

E.8. Determination of Absence of Regulated Pollutants

The permittee has determined in report dated May 17, 2015, that: (1) two pollutants (diethlyamine and triethylamine), regulated under 40 CFR 439, Subpart C, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are neither used nor generated in regulated categorical operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records, for a period of at least three (3) years following expiration of this permit. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, and including at least one sampling of the permittee's regulated categorical process wastewater prior to any treatment present at the facility, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

E.9. Absence Certification 439 Pollutants and Once per Year Self-Monitoring – SP 915, 930, 936, 939

Based on the determination referenced above and on permittee's verification dated August 23, 2017, and May 17, 2015, that: (1) two pollutants (diethlyamine and triethylamine), regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points 915, 936 and 939, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling point 930, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

E.10. 439 Surrogate Recommendation & Certification – SP 920, 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation, in report dated May 17, 2015, to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points 920 and 937. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

E.11. Reporting Continuous pH Monitoring Data - SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point 010, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

E.12. Certification Requirement for Sample Points with less than Quarterly Sample Frequency – SP 930

At sampling point 930, permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, the permittee shall certify on the quarterly self-monitoring report that there has been no change in the character of the wastes discharged at sampling point 930 since the last report.

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **SPECGX LLC**

Permit No: 1011728100 - 3 Effective Date: Dec 01, 2017 Expiration Date: Nov 30, 2022

Premise Address: 3600 N 2nd Street, St. Louis, MO 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002 and 930**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, 936 and 939,** subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points **915 and 930 and 936 and 939,** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

December 4, 2017

Jeff Blaies
Environmental Engineer
SPECGX LLC
3600 N. Second Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 – 3
For premise at: 3600 N. Second Street, 63147

Dear Mr. Blaies:

The Metropolitan St. Louis Sewer District has completed its review of your application of the Industrial Wastewater Discharge Permit for the above premise. This new permit is issued due to the ownership change and is effective on December 1, 2017. The previous permit, effective June 1, 2015, will now expire on **November 30, 2017**.

Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the draft permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include:

- New permit application received due to name and ownership change
- Added new Sample Point (SP) 939, including self-monitoring and special conditions
- At SP 905, mass discharge limits have been reduced due to a reduction in flowrate (approximately fourteen percent for the flowrate and for each pollutant)

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the draft permit, and we will proceed to issue the final permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SMRehmer

Scott M. Rehmer
Assistant Engineer

Enclosures: Draft Industrial Wastewater Discharge Permit

cc: Doug Mendoza
Mike Kynion

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 - 3

EFFECTIVE DATE: December 01, 2017
EXPIRATION DATE: November 30, 2022

ISSUED TO: SPECGX LLC
3600 N 2nd St
St. Louis, MO 63147

SIC NUMBER(S): 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 21
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938, 939

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): Sanitary, Storm water

WASTEWATER SOURCE AND CATEGORY: 1,000

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 20,327

WASTEWATER SOURCE AND CATEGORY: Sanitary, Non-categorical Process, Lab wastewater, flow from offsite (009), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	*****	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [deg C]	*****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	*****	Daily Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

DRAFT

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,000

WASTEWATER SOURCE AND CATEGORY: Non-contact cooling water, Lab wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of storage pad T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency bypass (pump station), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 7,700

WASTEWATER SOURCE AND CATEGORY: Flow from offsite (W of Broadway), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	*****	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [deg C]	*****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	*****	Daily Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 426,206

WASTEWATER SOURCE AND CATEGORY: Categorical (from 905, 912, 915, 920, 927, 930, 933, 936, 937, 938, 939); Sanitary, Non-contact cooling water, Plant & Equipment Washdown, Boiler blowdown, Regen/Reject water, Lab wastewater, Kitchen wastewater, Process wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand[mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	****	Daily Avg	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Cyanide Amenable to Chlorination [mg/L]	1.2	Instant	Once/3 mo
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency bypass (overflow from Plant 5), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C, PSES), Lab wastewater, Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

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Parameter	Limit *	Limit Type **	Sampling Frequency
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 4,927

WASTEWATER SOURCE AND CATEGORY: Sanitary, Non-categorical process, Lab wastewater, flow from offsite (SP009), Storm water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 52,001

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	156	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	39	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	12	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	4	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	12	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	4	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	12	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	4	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	25	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	6	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	156	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	113	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	35	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	156	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	39	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	156	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	75	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	75	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	13	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	45	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	113	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	32	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	15	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	55	Daily Max	Once/3 mo
Acenaphthene [g/Day]	4	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	9	Daily Max	Once/3 mo
Anthracene [g/Day]	4	Monthly Avg	Once/3 mo
Anthracene [g/Day]	9	Daily Max	Once/3 mo
Benzene [g/Day]	11	Monthly Avg	Once/3 mo
Benzene [g/Day]	26	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	19	Monthly Avg	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	51	Daily Max	Once/3 mo

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Parameter	Limit *	Limit Type **	Sampling Frequency
Carbon Tetrachloride [g/Day]	28	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	75	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	28	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	75	Daily Max	Once/3 mo
Chloroethane [g/Day]	22	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	58	Daily Max	Once/3 mo
Chloroform [g/Day]	22	Monthly Avg	Once/3 mo
Chloroform [g/Day]	64	Daily Max	Once/3 mo
Chloromethane [g/Day]	22	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	58	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	22	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	9	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	9	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	28	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	75	Daily Max	Once/3 mo
Fluoranthene [g/Day]	11	Daily Max	Once/3 mo
Fluoranthene [g/Day]	4	Monthly Avg	Once/3 mo
Fluorene [g/Day]	4	Monthly Avg	Once/3 mo
Fluorene [g/Day]	9	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	156	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	39	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	28	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	75	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	156	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	39	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	33	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	7	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	4	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	9	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	1260	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	440	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	4	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	9	Daily Max	Once/3 mo
Pyrene [g/Day]	4	Monthly Avg	Once/3 mo
Pyrene [g/Day]	9	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	32	Daily Max	Once/3 mo
Toluene [g/Day]	15	Daily Max	Once/3 mo
Toluene [g/Day]	6	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	13	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	14	Daily Max	Once/3 mo
Trichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	19	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	34	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo

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* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DRAFT

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 66,665

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from Bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	5459	Daily Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Avg	Once/mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of bldg 6

AVERAGE WASTEWATER FLOW (GPD): 500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Ammonia (as N) [mg/L]	***	Daily Avg	Once/3 mo
Temperature	****	Daily Avg	Once/3 mo
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	****	Daily Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo

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Parameter	Limit *	Limit Type **	Sampling Frequency
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	30	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	30	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of bldg 512

AVERAGE WASTEWATER FLOW (GPD): 21,600

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in bldg 6

AVERAGE WASTEWATER FLOW (GPD): 500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type *	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/year
Methylene Chloride [mg/L]	3.0	Daily Max	Once/year
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/year
Acetone [mg/L]	8.2	Monthly Avg	Once/year
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/year
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/year
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/year
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260

AVERAGE WASTEWATER FLOW (GPD): 7,929

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo

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Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethyl amine [mg/L]	100	Monthly Avg	Once/year
Diethyl amine [mg/L]	255	Daily Max	Once/year
Triethyl amine [mg/L]	100	Monthly Avg	Once/year
Triethyl amine [mg/L]	255	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of bldg 501

AVERAGE WASTEWATER FLOW (GPD): 37,400

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 40

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit*	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 939

SAMPLING POINT LOCATION: Valve from T-700 and T-710, inside bldg 504

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo

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Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
Diethyl amine [mg/L]	100	Monthly Avg	Once/year
Diethyl amine [mg/L]	255	Daily Max	Once/year
Triethyl amine [mg/L]	100	Monthly Avg	Once/year
Triethyl amine [mg/L]	255	Daily Max	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

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4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by January 28, 2018. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

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10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

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2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

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H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

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SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. SPECIAL BILLING REPORTING REQUIREMENTS

A.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Wastewater User Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on ninety-six (96) percent of the used water (on an annual basis) being discharged to the District from account number 118821. The permittee shall notify the District's Division of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

A.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Wastewater User Charge Ordinances, the permittee is currently subject to extra-strength surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and/or Total Suspended Solids (TSS). The permittee's current surcharge billing values are: 467 mg/l for BOD; 926 mg/l for COD; and 49 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

B. PROHIBITED DISCHARGES

B.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point 905. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point 905.

C. DERIVATION OF LIMITATIONS

C.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

D. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

D.1. No Monitoring When Influenced by Storm Runoff

Sampling points 003, 008, 009, 010, 011, 080, and 099 may, at times, convey storm water in addition to wastewater regulated by this permit. The self-monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

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D.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point 009 and "downstream" sampling point 003. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point 099. Permittee shall perform monitoring at both 009 and 003 within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at 099, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate
DC = downstream concentration
UF = upstream flow rate
UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

D.3. Special Sampling & Analytical Procedure – SP 008, 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.4. Special Sampling & Analytical Procedure – SP 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24-hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.5. Special Sampling & Analytical Procedure – SP 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

D.6. Special Sampling & Analytical Procedure – SP 080, 936, 939

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points 080, 936, and 939; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

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E. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

E.1. Sampling Not Required at Non-Toxic / Low-Flow Point

The permittee is not required to sample discharges at sampling points 001 and 002, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

E.2. Sampling Not Required at Connections with NO Sample Point and with Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

E.3. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

E.4. Certification of No Cyanide Under 439 - SP 080, 915, 936, 939

The permittee has determined in report dated August 23, 2017, and May 17, 2015, that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points 080, 915, 936, and 939. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

E.5. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3

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1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

E.6. Report Results Under Mass Discharge Limits – SP 905

The limitations at sampling point 905 are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

E.7. Special Certification & Reporting Requirement - SP 930, 933, 936, 939

For sampling points 930, 933, 936 and 939 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, 936, and 939 are adhered to.

E.8. Determination of Absence of Regulated Pollutants

The permittee has determined in report dated May 17, 2015, that: (1) two pollutants (diethlyamine and triethylamine), regulated under 40 CFR 439, Subpart C, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are neither used nor generated in regulated categorical operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records, for a period of at least three (3) years following expiration of this permit. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, and including at least one sampling of the permittee's regulated categorical process wastewater prior to any treatment present at the facility, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

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E.9. Absence Certification 439 Pollutants and Once per Year Self-Monitoring – SP 915, 930, 936, 939

Based on the determination referenced above and on permittee's verification dated August 23, 2017, and May 17, 2015, that: (1) two pollutants (diethlyamine and triethylamine), regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points 915, 936 and 939, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling point 930, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

E.10. 439 Surrogate Recommendation & Certification – SP 920, 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation, in report dated May 17, 2015, to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points 920 and 937. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

E.11. Reporting Continuous pH Monitoring Data - SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point 010, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

E.12. Certification Requirement for Sample Points with less than Quarterly Sample Frequency – SP 930

At sampling point 930, permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, the permittee shall certify on the quarterly self-monitoring report that there has been no change in the character of the wastes discharged at sampling point 930 since the last report.

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METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **SPECGX LLC**

Permit No: 1011728100 - 3 Effective Date: Dec 01, 2017 Expiration Date: Nov 30, 2022

Premise Address: 3600 N 2nd Street, St. Louis, MO 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

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You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002 and 930**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, 936 and 939**, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points **915 and 930 and 936 and 939**, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION **All permittees must sign and complete the information below:** I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

DRAFT

SMETROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT FACT SHEET

Check one:
FIRST TIME PERMIT ☐
RENEWAL ☒

Prepared by: S. Rehmer	Date: 11/28/2017
Reviewed by:	Date:

PERMIT NO: 1011728100-3 EFFECTIVE DATE: 12/1/2017 EXPIRATION DATE: 11/30/2022

COMPANY NAME: SPECGX LLC

PREMISE ADDRESS: 3600 N. Second Street, 63147

RELATED ACCOUNT NUMBERS: n/a

TYPE OF OPERATION: Manufacturer of pharmaceuticals

TOTAL NUMBER OF SAMPLING POINTS: 21 or NO SAMPLING POINT ☐

NUMBER OF: ORDINANCE 9 CATEGORICAL 11 COMBINED 1

CATEGORICAL INDUSTRY? YES ☒ NO ☐

If Yes, 40 CFR 414 Subpart G + H PSES ☒ PSNS ☐

40 CFR 439 Subpart B-PSES; C-PSES; D-PSNS PSES ☒ PSNS ☒

EXTRA STRENGTH SURCHARGE? YES ☒ NO ☐ If Yes, BOD 467 COD 926 TSS 49

RETURN FACTOR? YES ☒ NO ☐ If Yes, Acct #(s) 118821 RF 0.96

SPECIAL CONDITIONS REQUIRED? YES ☒ NO ☐

All SMR start dates begin at start of calendar quarter: ☐ same as/containing permit effective date
☒ following permit effective date

SMR General Cert. B attached to first permit SP (001) at reporting frequency of once/3mo? Y ☒ N ☐

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Pollutant & Limitations Documentation Sheets:	☒	☐	
Permit Preparation Checklist:	☒	☐	
Production-based Standards Calc. Sheets (for Sampling Points _____)	☐	☐	☒
Mass-based Standards Calc. Sheets (for Sampling Points 905)	☒	☐	☐
Equivalent Concentration Limits Sheets (for Sampling Points _____)	☐	☐	☒
Most Strict Limits Sheets (for Sampling Points _____)	☐	☐	☒
Combined Wastestream Formula Sheets (for Sampling Points _____)	☐	☐	☒
Text of any Custom Special Cond's: If Yes, for which SCs: D.12(x4); E.21(x1)	☒	☐	☐

Other: _____

COMMENTS (Include notations of any significant changes from last permit):
New name/ownership; also added SP939; also, since SP905 volume down, the mass limits reduced.

PERMIT NO: 1011728100-3

SPECIAL CONDITIONS NOT TIED TO SPECIFIC SAMPLE POINTS

Special Condition:	# F.1	# F.2	# E.18	# E.5	# B.1	# C.6	# _____	# _____
List any related SMR certifications:	# _____	# _____	# _____	# B	# E	# _____	# _____	# _____
SMR certification frequency:	[none]	[none]	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]
List any related General Reports:	# _____	# _____	# RAD	# _____	# _____	# _____	# _____	# _____
General Report frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]

Are all the SMR certifications listed above associated with first permit sample point (001)? YES ☒ NO ☐ N/A (No Certs) ☐

Check here if there are no non-SP-specific Special Conditions: ☐

MSD 015553

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 001 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary + Storm water

Flow Rate: 1,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015554

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 002 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary

Flow Rate: 2,200 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# _____	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# A	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015555

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 003 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Downstream"), Sanitary, Non-cat process, Lab ww, flow from offsite (009), Storm water

Flow Rate: 20,327 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	No limits	once 3 mo	Standard + high volume	
pH	Standard	No limits	once 3 mo	Standard + high volume	
Temp	Standard	No limits	once 3 mo	Standard + high volume	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 20.3 k-gpd

MSD 015556

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 005 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Lab ww, NCCW

Flow Rate: 2,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Standard	Ord. 12559	once 3 mo	Standard + high volume	
Temp	Standard	Ord. 12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 18.3 k-gpd

MSD 015557

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 008 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass (pump station), Storm water

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ (Avg flow rate = 0 gpd; max = 1.4 M gpd)

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12a	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015558

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 009 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Upstream"), Flow from offsite (W of Broadway), Storm water

Flow Rate: 7,700 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	[none]	Standard	
BOD	Standard	No limits	[none]	Standard + high volume	☐
COD	Standard	No limits	[none]	Standard + high volume	☐
O&G	Standard	No limits	[none]	Standard + high volume	
pH	Standard	No limits	[none]	Standard + high volume	
Temp	Standard	No limits	[none]	Standard + high volume	
TSS	Standard	No limits	[none]	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015559

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 010 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Categorical (from 905, 912, 915, 920, 927, 930, 933, 936, 937, 938, 939), Sanitary, NCCW, P&E wash, Boiler blow, Regen/Reject, Storm, Lab ww, Kitchen ww, P&E wash, Process (garage)

Flow Rate: 426,206 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Standard	Ord. 12559	once 3 mo	Standard + high volume	
Temp	Standard	Ord. 12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Cr (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Cu (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Ni (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Zn (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# E.29	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# cont-pH	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 739.5 k-gpd

MSD 015560

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 011 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass (overflow from Plant 5), Storm water

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ (Avg flow rate = 0 gpd; max = 14 k-gpd)

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12a	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015561

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 080 **TYPE:** Ord ☐ Cat ☐ Comb ☒

Wastewater Components: Cat (439 Sub C PSES), Lab waste, Storm water

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
24 (no CN or NH3)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12d	# E.15	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# F	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 2.5 k-gpd

MSD 015562

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 099 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Difference between up 009 & down 003"), Sanitary, Non-cat process, Lab ww, flow from offsite (009), Storm water

Flow Rate: 4,927 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Excluded for up/down	No limits	[none]	[none]	
Temp	Excluded for up/down	No limits	[none]	[none]	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 12.6 k-gpd

MSD 015563

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 905 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (414 Sub G + H, PSES)

Flow Rate: 52,001 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
OCPSF list of 42	Categorical	414, Sub G+H, PSES	once 3 mo	Categorical + high volume	☐
pollutants			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.19	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: New Mass Limits, due to decrease in average flowrate; Prev flow 60.7 k-gpd.

MSD 015564

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 912 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Non-cat process ww (from bldgs 504+505)

Flow Rate: 66,665 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard; required for mass limit calc's	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
DMAC	Nature of production	MSD-derived limits	once/mo	Production based	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12b	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 114 k-gpd

MSD 015565

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 915 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 500 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of 24 (no CN or NH3)	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
Diethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
Triethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.22	# E.15	# E.35	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 4.7 k-gpd

MSD 015566

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 920 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 21,600 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume	☐
Toluene	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume + KP	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.24	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# I	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 38.0 k-gpd

MSD 015567

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 927 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 500 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once 3 mo	Categorical + high volume	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
List related SMR certs:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 4.7 k-gpd

MSD 015568

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 930 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once/year	Categorical + certified absence + sample data shows < DL for all five.	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.21	# E.22	# E.35	# E.4	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# H	# A	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☒ NO ☐ Explain: Self-monitoring was quarterly, now annually for all pollutants; included Cert A.

MSD 015569

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 933 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once 3 mo	Categorical + nature of ww	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.21	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015570

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 936 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 7,929 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of 24 (no CN or NH3)	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
Diethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
Triethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12d	# E.21	# E.22	# E.15	# E.35	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 13.96 k-gpd

MSD 015571

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 937 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 37,400 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume	☐
Toluene	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume + KP	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.24	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# I	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: Prev flow 65.8 k-gpd

MSD 015572

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 938 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub D, PSNS)

Flow Rate: 40 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub D, PSES	once 3 mo	Categorical + nature of ww	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12c	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015573

PERMIT NO: 1011728100-3

SAMPLING POINT REFERENCE NUMBER: 939 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 100 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of 24 (no CN or NH3)	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
Diethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
Triethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12d	# E.21	# E.22	# E.15	# E.35	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: New Sample Point

MSD 015574

PERMIT PREPARATION CHECKLIST – PART 1
(Fact Sheet Attachment)

Company Name: SPECGX LLC | Permit No.: 1011728100-3

Effective Date: 12/1/2017 | Prepared by: 11/30/22 | Date: 11/28/2017

REVIEW THE PRETREATMENT DATABASE (PIMS), INDUSTRY FILE AND PERMIT APPLICATION. ANSWER THESE QUESTIONS & UPDATE THE DATABASE PRIOR TO DEVELOPING THE DRAFT PERMIT.

1. Are the correct SICs listed? Yes ☒ No ☐
   If no, add _____ delete: _____

2. Is user in surcharge? Yes ☒ No ☐
   If yes, date last certified: 9/6/2017
   If yes, Special Condition F.2 applies.

3. Does user's premise have more than one MSD account? Yes ☐ No ☒
   If yes, were all account numbers correctly listed (including occupant #s)? Yes ☐ No ☐
   If no, have account numbers been corrected in database before proceeding? Yes ☐ No ☐

4. Does user have a Return Factor (RF) other than 1.00 for any account? Yes ☒ No ☐
   If yes, list acct no., RF and date last updated:
   Acct 00118821 RF 0.96 Updated 1/28/2002
   Acct _____ RF _____ Updated _____
   If yes, Special Condition F.1 applies.

5. Does user discharge water from a source not included in the MSD Billing system? Yes ☐ No ☒
   If yes, Special Condition F.3 & General Report "Discharge Volume for Billing" apply.
   If yes, Is a flow meter used to record the volume discharged from this other source? Yes ☐ No ☐
   If yes, SC E.37 and Gen. Rpt. "Calibration of Discharge Flow Meter" apply.
   If no, SC E.38 applies.

6. Have you established agreement among permit application, water consumption records and PIMS on component flows at each SP, total SP flows and total premise flow? Yes ☒ No ☐
   If no, explain _____

7. Has user been granted any variances from ordinance limitations? Yes ☐ No ☒
   If yes, Application Date: _____
   Approval Date: _____, or approved as part of this permit issuance? Yes ☐
   (Variances cannot last more than 5 years after approval)
   If yes, Parameter(s) _____ at SP(s) _____
   If yes, Special Condition C.4 applies.

8. Have any numerical limitations been applied to user, in addition to those already contained in the ordinance? Yes ☐ No ☒
   If yes, Parameter(s) _____ at SP(s) _____
   Date limit(s) originally applied: _____, or as part of variance above? ☐
   If yes, are Special Conditions, other than the standard special conditions, required? Yes ☐ No ☐
   If yes, explain under "non-standard special conditions" question below.

9. Does user discharge any radioactive materials? Yes ☒ No ☐
   If yes, Special Condition E.18 & General Report "Radiation Discharge" apply.

10. Does user generate wastes and/or wastewater by genetic engineering research? Yes ☐ No ☒
    If yes, Special Condition B.12 applies.

11. Do all of the user's active connections, to MSD sewers, have identified SPs? Yes ☐ No ☒
    If no, explain: numerous laterals and connections
    If no, is documentation sufficient to use Special Condition Yes ☒ No ☐
    E.5 ☒ "Sampling Not Required at Connections with NO SP and with SP on parts",
    E.6 ☐ "Sampling Not Required at Connection with NO SP on it",
    E.7 ☐ "Sampling Not Required at Connection with SP on only part of it", or
    E.8 ☐ "Sampling Not Required at Permittee with No SP"?
    If no, is compliance schedule necessary to obtain documentation? Yes ☐ No ☐
    If yes, Special Condition G.1 is necessary.

12. Does premise require use of "upstream/downstream" sampling? Yes ☒ No ☐
    If yes, Upstream SP # 009 & Downstream SP # 003
    If yes, Special Conditions D.11 and E.9 apply.

13. Are there any inactive connections to MSD sewers? Yes ☐ No ☒
    If yes, Special Condition E10 applies.

14. Have you verified, in PIMS, the SP location descriptions are complete and adequate? Yes ☒ No ☐

15. Have you verified, in PIMS, the discharge components, process descriptions and related flows at all SPs, are complete and adequate? Yes ☒ No ☐

16. Does user have any discharges subject to NPDES permitting regulations? Yes ☐ No ☒
If yes, list MSD points & corresponding NPDES points: _____
If yes, Special Condition E.14 applies.

17. Do any SPs convey stormwater in addition to regulated wastewater? Yes ☒ No ☐
If yes, list points: 003, 008, 009, 010, 011, 080, 099 and note on P&LD sheets.
If yes, Special Condition D.10 applies.

18. Are any SPs Dry Justified in PIMS? Yes ☐ No ☒
If yes, list points _____ and note on P&LD sheets.
If yes, no self-monitoring is required, and Special Condition E.3 applies.

19. Are there SPs where user discharges only non-process wastewater? Yes ☒ No ☐
If yes, does no self-monitoring requirement / Special Condition E.3 apply? Yes ☒ No ☐
If yes, list points _____ and note on P&LD sheets.

20. Are there SPs with infrequent discharges that require coordination with the user for MSD to collect samples? Yes ☐ No ☒
If yes, list points: _____ and note on P&LD sheets.
If yes, Special Condition D.14 applies.

21. Is documentation adequate to allow use of grab samples in lieu of composites at any SPs? Yes ☐ No ☒
If yes, list points _____ and note on P&LD sheets.
If yes, Special Condition D.1 applies.

22. Are there SPs with self-monitoring requirements, but at less than a quarterly frequency, for all parameters? Yes ☒ No ☐
If yes, list points 930 and note on P&LD sheets.
If yes, Special Condition E.4 applies.

23. Can local limits TTO be removed from monitoring at any ordinance SPs? Yes ☐ No ☒
If yes, list points _____ and explain on P&LD sheets.
If yes, does TTO also need to be removed from MSD's monitoring? Yes ☐ No ☐
If yes, discuss with inspector (name: _____) and explain why it had been monitored by MSD: _____

24. Does user have a history of compliance problems at this or a previous location? Yes ☐ No ☒
If yes, explain problems: _____
If yes, is a compliance schedule required? Yes ☐ No ☐
If yes, Special Condition G.1 applies.
Is supporting documentation attached? Yes ☐ No ☐
If yes, are any other special requirements required? Yes ☐ No ☐
Explain: _____

25. Is user required to monitor for Total Phenols at an ordinance SP? Yes ☐ No ☒
If yes, does Special Condition D.3 for Total Phenols monitoring options apply? Yes ☐ No ☐

26. Has user chosen to employ continuous monitoring techniques for:
pH? If yes, list points 010. SC E.29 & Gen Rpt "Cont-Mon pH Excursions" apply. Yes ☒ No ☐
Temp? If yes, list points _____. SC E.30 & Gen Rpt "Cont-Mon Temp Excursions" apply. Yes ☐ No ☐
LEL? If yes, list points _____. SC E.31 & Gen Rpt "Cont-Mon LEL Excursions" apply. Yes ☐ No ☐
If yes for pH or Temp, have corresponding SP limits in PIMS been set to 'Alert Only' and does PIMS Monitoring Special Instructions have notes re. field 'violations'? Yes ☐ No ☐

27. Does the company perform any processes for which summaries of activities are needed? Yes ☐ No ☒
If yes, Special Condition E.33 & General Report "Process Activity Summary" apply.

28. Are special billing conditions, other than the standard Special Conditions, needed? Yes ☐ No ☒
If yes, describe: _____
If yes, Special Condition F.4 applies.
Does General Report "Discharge Volume for Billing" apply? Yes ☐ No ☐
Does General Report "Custom Non-Standard" apply? Yes ☐ No ☐

29. Are any Special Conditions, other than the standard special conditions, required? Yes ☒ No ☐
If yes, explain: Five (5); see attached memo.
Which Special Condition applies? D.12 (x4); E.21 (x1)
Is supporting documentation attached? Yes ☒ No ☐
If no, explain: _____
Does General Report "Custom Non-Standard" apply? Yes ☐ No ☐

30. Is user a hauled waste industry, discharging its wastewater at the Hauled Waste Station? Yes ☐ No ☒
If yes, have ☐ permit title, ☐ cover page, & ☐ general conditions been modified? Yes ☐ No ☐
If yes, Special Conditions B.9, C.7, D.13, H.1, and H.2 apply.

31. Is user classified as a Categorical Industrial User (CIU)? Yes ☒ No ☐
If yes, complete part 2 of checklist. If no, STOP here.

List all the Special Conditions from Part 1 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
	F.2	n/a
	F.1	n/a
Rad. Discharge	E.18	n/a
	E.5	n/a
	D.11	003, 009, 099
	E.9	003, 009, 099
	D.10	003, 008, 009, 010, 011, 080, 099
	E.3	001, 002
Cont-mon-pH	E.29	010
	D.12a	008, 011
	D.12b	912
	D.12c	938
	D.12d	080, 936, 939
	E.21	930, 933, 936, 939
	E.4	930

PERMIT PREPARATION CHECKLIST – PART 2
(Fact Sheet Attachment)

Company Name: SPECGX LLC | Permit No.: 1011728100-3

Effective Date: 12/1/2017 | Prepared by: 11/30/22 | Date: 11/28/2017

32. Do any SPs have both Ordinance & Categorical limits? Yes ☒ No ☐
    If yes, which sampling point(s): 080; not applicable, no overlapping pollutants.
    If yes, Special Condition C.3 is applicable.
    Is Most-Strict Limits worksheet attached? Yes ☐ No ☒

33. Is the Combined Wastestream Formula (CWF) required? Yes ☐ No ☒
    If yes, which sampling point(s): _____
    If yes, date calculated (will differ from permit date/date applied): _____
    If yes, Special Condition C.2 is applicable.
    Is Combined Wastestream Formula worksheet attached? Yes ☐ No ☐

34. Are categorical limitations based on production rates? Yes ☐ No ☒
    If yes, which sampling point(s): _____
    If yes, which 40 CFR Part _____, Subpart _____, ES/NS _____.
    If yes, date calculated (will differ from permit date/date applied): _____
    If yes Special Conditions C.1, E.1, and E.2 apply
    If yes, General Report "Production Rates"applies. Yes ☐ No ☐
    Is Production-based Standards Calculation sheet attached?

35. Are categorical limitations mass limits? Yes ☒ No ☐
    If yes, which sampling point(s): 905
    If yes, which 40 CFR Part 414, Subpart G+H, ES/NS ES
    If yes, have facility inspections verified that dilution is not being substituted for treatment? Yes ☐ No ☒
    If yes, Special Condition E.36 is applicable.
    Source/location for equiv. conc. limits: 40 CFR _____.
    If no, mass-based limits must be calculated. See below.
    If no, date mass-based limits calculated
    (will differ from permit date/date applied): 11/27/2017
    If no, Special Condition E.19 is applicable.
    Is Mass-based Standards Calculation sheet attached? Yes ☒ No ☐

36. Does user perform categorical operations, without a wastewater discharge? Yes ☐ No ☐
    If yes, which 40 CFR Part 414, Subpart G+H, ES/NS ES.
    If yes, which Special Condition applies?
    B.1 ☒ "Categorical Waste Discharge Prohibited",
    B.2 ☐ "No Stds Existing Source Cat Waste Discharge Not Authorized", or
    N/A ☐ Explain: _____

37. Has user certified to the absence of specific regulated categorical pollutants? Yes ☒ No ☐
    If yes, is user a pharmaceutical manufacturer subject to 40 CFR 439? Yes ☒ No ☐
    If no, Special Conditions E.22 (absence) & E.23 (no self-mon) are applicable.
    If yes (subject to 439), are there any "absent" pollutants other than cyanide? Yes ☒ No ☐
    If yes, SCs E.22 & E.35 (once/yr self-mon) are applicable for non-CN polls.
    For absence of cyanide, see 439-specific question below.
    Certification date: 11/27/2015 (Must submit new certification for each permit)
    List absent pollutants: Diethyl amine & Triethyl amine at SP's 915, 936, 939; all five 439-B pollutants at SP 930. Yes ☒ No ☐
    Were all these pollutants non-detect in past monitoring?
    If no, explain: _____
    (including if pollutants were compared to intake water levels or determined to be solely from sanitary wastewater)
    Have "alert-only" detection level limits for absent pollutants been added to database, for verification purposes? Yes ☒ No ☐

38. Is user a job shop electroplater with >10,000 gpd subject to 40 CFR 413? Yes ☐ No ☒
    If yes, Special Condition D.2 is applicable.

39. Is user an organic chemical (OCPSF) manufacturer subject to 40 CFR 414? Yes ☒ No ☐
If yes, does user have metal- or cyanide-bearing wastestreams as defined in 40 CFR 414 Appendix A or as identified by MSD? Yes ☐ No ☒
If yes, have the requirements of 40 CFR 414.111(b) been applied, separate SPs identified (or upstream SPs solely for metal or cyanide limits), have metal or cyanide limits been applied, and have metal or cyanide monitoring req'ts added? Yes ☐ No ☐
Is documentation attached? Yes ☐ No ☐

40. Is user a new source soap and detergent manufacturer subject to 40 CFR 417? Yes ☐ No ☒
If yes, is user subject to Subparts O ☐, P ☐, Q ☐, or R ☐? Yes ☐ No ☐
If yes, for Subpart O, Special Condition B.4 is applicable.
If yes, for Subpart P, Special Condition B.5 is applicable.
If yes, for Subpart Q, Special Condition B.6 is applicable.
If yes, for Subpart R, Special Condition B.7 is applicable.

41. Is user a leather tanner/finisher subject to 40 CFR 425? Yes ☐ No ☒
If yes, is user subject to subpart C (Appendix B)? Yes ☐ No ☐
If yes, Special Condition D.7 is applicable.
If no, Special Condition D.6 is applicable.

42. Is user a pulp, paper, and paperboard company subject to 40 CFR 430? Yes ☐ No ☒
If yes, is user subject to a subpart allowing certification for absence of biocides? Yes ☐ No ☐
If yes, for which subpart: _____
If yes, has user certified to the absence of biocides? Yes ☐ No ☐
If yes, Special Condition E.32 is applicable.

43. Is user a metal finisher subject to 40 CFR 433? Yes ☐ No ☒
If yes, does it use cyanide in its 433 operations? Yes ☐ No ☐
If yes, does user have a separate cyanide sample point after treatment and prior to dilution with other streams? Yes ☐ No ☐
If no, modified Special Condition C.2 for cyanide limit is applicable.
Is CWF worksheet attached? Yes ☐ No ☐

44. Is user a Centralized Waste Treater subject to 40 CFR 437? Yes ☐ No ☒
If yes, does it performs operations subject to Subpart(s) A ☐, B ☐ or C ☐? Yes ☐ No ☐
If subject to multiple Subparts, has user requested and been approved for application of Subpart D standards? Yes ☐ No ☐
If yes, Special Conditions E.25 and E.26 are applicable.
If no, have separate sample points been established for each Subpart? Yes ☐ No ☐
If subject to 40 CFR 437, does user receive any waste that contains cyanide at a concentration greater than 136 mg/l? Yes ☐ No ☐
If yes, does user have a separate cyanide sample point after treatment and prior to dilution with other streams? Yes ☐ No ☐
If no, modified Special Condition C.2 for cyanide limit is applicable.
Is CWF worksheet attached? Yes ☐ No ☐
If subject to 40 CFR 437, SC E.33 & General Rpt "Process Activity Summary" apply.
If subject to 40 CFR 437, SC F.3 & General Rpt "Discharge Volume for Billing" apply.

45. Is user a pharmaceutical manufacturer subject to 40 CFR 439? Yes ☒ No ☐
If yes, has user requested, and been approved for, the use of surrogate pollutants for monitoring? Yes ☒ No ☐
Request date: 11/27/2015 (Must submit new request for each permit)
List high strippability surrogate: Toluene
List medium strippability surrogate: Tetrahydrofuran
If yes, Special Condition E.24 is applicable.
If yes, is user subject to Subpart A or C? Yes ☒ No ☐
If yes, has user certified to the absence of cyanide? Yes ☒ No ☐
If yes, Special Conditions E.22 (absence) & E.15 (cyanide limit doesn't apply, no self-mon) are applicable.
Cert date: 11/27/2015 (Must submit new certification for each permit)
Have cyanide limits been removed and "alert-only" detection level limits been added to database, for verification purposes? Yes ☒ No ☐
If no, must total cyanide limitations be adjusted? Yes ☐ No ☒
If yes, calculate adjusted limitations. Is worksheet attached? Yes ☐ No ☒
If yes, does user discharge to a Treatment Plant with nitrification capability, as defined at 40 CFR 439.1(i)? (Plant: Bissell Point, documentation date: 2017. Yes ☒ No ☐

If yes, Special Condition C.6 is applicable (ammonia limit doesn't apply).
Ammonia should remain as a self-monitoring requirement.
Have ammonia limits been changed to "alert-only" limits? Yes ☒ No ☐

46. Is user a pesticide formulator/packager/repackager subject to 40 CFR 455? Yes ☐ No ☒
If yes, has user requested & been approved for the poll. prevention allowable discharge option?
If yes, Special Conditions E.27 and E.28 are applicable. Yes ☐ No ☐
If no, Special Condition B.11 is applicable.
If yes, does user have DOT aerosol leak test bath water from non-continuous overflow baths (batch baths)?
If yes, Special Condition E.34 & General Report "Reporting Aerosol Leak Test Bath Water Discharges" apply Yes ☐ No ☐

47. Is user a metal molder/caster subject to 40 CFR 464? Yes ☐ No ☒
If yes, Special Condition D.4 is applicable.

48. Is user a coil coater subject to 40 CFR 465? Yes ☐ No ☒
If yes, is user subject to 40 CFR 465 Subpart(s) A ☐, B ☐, or C ☐? Yes ☐ No ☐
If yes, Special Condition E.16 is applicable.
If yes, is user subject to 40 CFR 465 Subpart D? Yes ☐ No ☐
If yes, Special Conditions D.5, D.9, and E.17 are applicable.
If yes, is there a separate categorical SP for the regulated waste? Yes ☐ No ☐
If yes, include O&G (Hydrocarbon) in the list of parameters at the categorical SP.
If no, and categorical waste discharges at a combined ord/cat SP point, include O&G (Total) and O&G (Hydrocarbon) in the list of parameters at the combined SP.

49. Can user certify, in lieu of monitoring, for categorical TTO at a categorical or combined SP? Yes ☐ No ☒
If yes which SP(s): _____
If yes Spec Cond E.11 (categorical) ☐ or E.12 (combined) ☐ is applicable.

50. Do any sampling points have both Ordinance & Categorical TTO limits? Yes ☐ No ☒
If yes, which SP(s): _____
Is Special Condition E.13 (for TTO's derived from different definitions) applicable? Yes ☐ No ☐
If yes, explain: _____.

51. May user monitor for Oil & Grease, in lieu of TTO, at a categorical or combined SP? Yes ☐ No ☒
If yes, which SP(s): _____
If yes, Special Condition D.8 is applicable.
If yes, is a modification of Special Condition E.13 applicable? Yes ☐ No ☐

52. Does user perform any categorical operations for which the specific category has not already been listed above? Yes ☐ No ☒
If yes, which 40 CFR Part _____, Subpart _____, ES/NS _____.
If yes, do any Special Conditions apply that are not already noted above? Yes ☐ No ☐
If yes, explain: _____
If yes, do any General Reports apply that are not already noted above? Yes ☐ No ☐
If yes, explain: _____

List all the Special Conditions from Part 2 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
	E.19	905
	B.1	n/a
	E.22	915, 930, 936, 939
	E.15	080, 915, 936, 939
	E.24	920, 937
	E.35	915, 930, 936, 939
	C.6	n/a

SpecGX, 3600 N 2nd St, 63147; Facility ID = 1011728100-3; SP-905; 11-28-2017

414.111 Org. Chem, Plastics, Synthetic Fibers Effluent characteristics	PSES and PSNS			SP-905				
	DM (ug/L)	MA (ug/L)	SP-905	DM (g/Day)	MA (g/Day)		DM (g/Day)	MA (g/Day)
1,1,1-Trichloroethane	59	22	**52,001**	12	4			
1,1,2-Trichloroethane	127	32	**GPD**	25	6	**GPD**		
1,1-Dichloroethane	59	22	volume	12	4			
1,1-Dichloroethylene	60	22	update	12	4			
1,2,4-Trichlorobenzene	794	196	received	156	39			
1,2-Dichlorobenzene	794	196	11-27-17	156	39			
1,2-Dichloroethane	574	180		113	35			
1,2-Dichloropropane	794	196		156	39			
1,2-trans-Dichloroethylene (trans...)	66	25		13	5			
1,3-Dichlorobenzene	380	142		75	28			
1,3-Dichloropropylene (cis&trans...)	794	196		156	39			
1,4-Dichlorobenzene	380	142		75	28			
2-Nitrophenol	231	65		45	13			
4,6-Dinitro-(o-cresol) (...2-MePh)	277	78		55	15			
4-Nitrophenol	576	162		113	32			
Acenaphthene	47	19		9	4			
Anthracene	47	19		9	4			
Benzene	134	57		26	11			
Bis(2-ethylhexyl) phthalate	258	95		51	19			
Carbon Tetrachloride	380	142		75	28			
Chlorobenzene	380	142		75	28			
Chloroethane	295	110		58	22			
Chloroform	325	111		64	22			
Diethyl phthalate	113	46		22	9			
Dimethyl phthalate	47	19		9	4			
Di-n-butyl phthalate	43	20		8	4			
Ethylbenzene	380	142		75	28			
Fluoranthene	54	22		11	4			
Fluorene	47	19		9	4			
Hexachlorobenzene	794	196		156	39			
Hexachlorobutadiene	380	142		75	28			
Hexachloroethane	794	196		156	39			
Methyl Chloride (ChloroMethane)	295	110		58	22			
Methylene Chloride	170	36		33	7			
Naphthalene	47	19		9	4			
Nitrobenzene	6,402	2,237		1260	440			
Phenanthrene	47	19		9	4			
Pyrene	48	20		9	4			
Tetrachloroethylene	164	52		32	10			
Toluene	74	28		15	6			
Total Cyanide	1,200	420		236	83			
Total Lead	690	320		136	63			
Total Zinc	2,610	1,050		514	207			
Trichloroethylene	69	26		14	5			
Vinyl Chloride	172	97		34	19			

DM = Daily Max MA = Monthly Average

SUPPORTING MEMORANDUM

FROM : Scott M. Rehmer SR DATE : 11/28/2017

TO : PERMIT PREP CHECKLIST

RE : **MALLINCKRODT INC.** PERMIT : **1011728100-3**

EFFECTIVE DATE : **12/01/2017**

The following are FIVE (5) modified special conditions added to the above permit.

D.12.a (special, D.3) Special Sampling & Analytical Procedure - 008, 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.12.b (special, D.4) Special Sampling & Analytical Procedure - 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.12.c (special, D.5) Special Sampling & Analytical Procedure - 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

D.12.d (special, D.6) Special Sampling & Analytical Procedure – 080, 936, 939

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points 080, 936, and 939; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

E.21 (special, E.7) Special Cert & Reporting Requirement - 930, 933, 936, 939

For sampling points 930, 933, 936, and 939, permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, 936, and 939 are adhered to.

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

April 29, 2015

Brett Shank
EHS Manager
MALLINCKRODT LLC
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 - 2
For premise at: 3600 N. 2nd Street
St. Louis, MO 63147

Dear Mr. Shank:

The Metropolitan St. Louis Sewer District has developed an Industrial Wastewater Discharge Permit for the above premise. Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations. The current permit expires on May 31, 2015.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include:

- At SP930, self-monitoring reduced from quarterly to annually for all pollutants, due to a certification statement and low levels in the sample data. Special Condition E.9 and E.12, and Special Certifications A and H now include a reference to SP930.
- At SP905, because the flowrate estimate has been reduced by about 40 percent, all of the mass discharge limits have been reduced by the same.

You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The first report due date, for this reissued permit, is based on a complete calendar quarter monitoring period.. The permittee remains responsible for reporting for the preceding calendar quarter under the previous permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals. Instructions for completing the report form also are enclosed with this letter.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the permit.

Please be aware that an annual permit fee will be added to your monthly sewer bill, or you will receive a separate bill, to cover administrative costs associated with the permit, as provided for under MSD ordinance 12413. The fee is normally added to the last bill of each calendar year, or shortly thereafter.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Enclosures: Industrial Wastewater Discharge Permit,
Self-monitoring Report Form, Self-monitoring Report Instructions

cc: Doug Mendoza
Tom Boehm

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 - 2

EFFECTIVE DATE: June 01, 2015
EXPIRATION DATE: May 31, 2020

ISSUED TO: MALLINCKRODT LLC
3600 N Second Street
St. Louis, MO 63147

SIC NUMBER(S): 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 20
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrehan, 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,000

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A:11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of Bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of Bldg 91

AVERAGE WASTEWATER FLOW (GPD): 20,327

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Categorical Process Waste (Machine shop, painting, parts washing) + Laboratory Waste (439 Sub E NA (No Stds)) + Flow From Offsite (From SP 009) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of Bldg #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 18,336

WASTEWATER SOURCE AND CATEGORY: Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Non-Contact Cooling Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of Bldg T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Pump station bypass to Salisbury trunk) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt Street, 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 7,700

WASTEWATER SOURCE AND CATEGORY: Flow from Offsite (Offsite W of Broadway) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH with square lid 50' N of neutralization control Bldg at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 739,523

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Contact Cooling Water (Includes CT blowdown) + Plant & Equipment Washdown (General) + Boiler Blowdown + Regeneration/Reject Water + Categorical (905,912,915,920,927,930,933,936,937,938) + Storm Water + Laboratory Waste (Both QC and R+D) + Kitchen Waste + Plant & Equipment Washdown (General) + Process Waste (Garage) + Plant & Equipment Washdown (General) + Plant & Equipment Washdown (General)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
Cyanide Amenable to Chlorination [mg/L]	1.2	Instant	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of Bldg 223, under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Overflow from Plant 5) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of Bldg # 98

AVERAGE WASTEWATER FLOW (GPD): 2,507

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no)) + Laboratory Waste(439 Sub E NA (No Stds) & non-439 R&D) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo

Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 12,627

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Categorical Process Waste + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside Bldg X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 60,676

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	182	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	45	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	14	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	5	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	29	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	7	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	14	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	5	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	14	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	182	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	182	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	132	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	41	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	182	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	45	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	87	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	15	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	53	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	18	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	64	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	132	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	37	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	11	Daily Max	Once/3 mo
Acenaphthene [g/Day]	4	Monthly Avg	Once/3 mo
Anthracene [g/Day]	11	Daily Max	Once/3 mo
Anthracene [g/Day]	4	Monthly Avg	Once/3 mo
Benzene [g/Day]	13	Monthly Avg	Once/3 mo
Benzene [g/Day]	31	Daily Max	Once/3 mo

Bis (2-EthylHexyl) Phthalate [g/Day]	22	Monthly Avg	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	59	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	33	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	87	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	87	Daily Max	Once/3 mo
Chloroethane [g/Day]	25	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	68	Daily Max	Once/3 mo
Chloroform [g/Day]	25	Monthly Avg	Once/3 mo
Chloroform [g/Day]	75	Daily Max	Once/3 mo
Chloromethane [g/Day]	25	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	68	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	10	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	5	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	11	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	26	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	11	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	33	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	87	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Fluoranthene [g/Day]	12	Daily Max	Once/3 mo
Fluoranthene [g/Day]	5	Monthly Avg	Once/3 mo
Fluorene [g/Day]	11	Daily Max	Once/3 mo
Fluorene [g/Day]	4	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	182	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	33	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	87	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	182	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	45	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	39	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	8	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	11	Daily Max	Once/3 mo
Naphthalene [g/Day]	4	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	1470	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	514	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	11	Daily Max	Once/3 mo
Phenanthrene [g/Day]	4	Monthly Avg	Once/3 mo
Pyrene [g/Day]	11	Daily Max	Once/3 mo
Pyrene [g/Day]	5	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	12	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	38	Daily Max	Once/3 mo
Toluene [g/Day]	17	Daily Max	Once/3 mo
Toluene [g/Day]	6	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	15	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	6	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	16	Daily Max	Once/3 mo
Trichloroethene [g/Day]	6	Monthly Avg	Once/3 mo

Vinyl Chloride [g/Day]	22	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	40	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank # 450 on SE corner of Bldg 504

AVERAGE WASTEWATER FLOW (GPD): 114,067

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
N,N-Dimethyl Acetamide [LB/DY]	5459	Monthly Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Max	Once/mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of Bldg 6

AVERAGE WASTEWATER FLOW (GPD): 4,746

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ammonia (as N)	*****	Daily Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Temperature	*****	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of Bldg 512

AVERAGE WASTEWATER FLOW (GPD): 38,021

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in Bldg 6

AVERAGE WASTEWATER FLOW (GPD): 4,746

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 550

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/year
Acetone [mg/L]	8.2	Monthly Avg	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/year
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/year
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/year
Methylene Chloride [mg/L]	3.0	Daily Max	Once/year
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/year
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 77

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydro-generator bldg 8' from S wall in SE corner of Bldg 260

AVERAGE WASTEWATER FLOW (GPD): 13,957

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of Bldg 501

AVERAGE WASTEWATER FLOW (GPD): 65,820

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Bldg 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 40

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by October 28, 2015. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. SPECIAL BILLING REPORTING REQUIREMENTS

A.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Wastewater User Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on **ninety-six (96) percent** of the used water (on an annual basis) being discharged to the District from account number 118821. The permittee shall notify the District's Division of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

A.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Wastewater User Charge Ordinances, the permittee is currently subject to extra-strength surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and/or Total Suspended Solids (TSS). The permittee's current surcharge billing values are: **520** mg/l for BOD; **1039** mg/l for COD; and **112** mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

B. PROHIBITED DISCHARGES

B.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point **905**. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point **905**.

C. DERIVATION OF LIMITATIONS

C.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

D. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

D.1. No Monitoring When Influenced by Storm Runoff

Sampling points **003, 008, 009, 010, 011, 080, and 099** may, at times, convey storm water in addition to wastewater regulated by this permit. The self-monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

D.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point **009** and "downstream" sampling point **003**. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point **099**. Permittee shall perform monitoring at both **009** and **003** within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at **099**, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; UF = upstream flow rate
DC = downstream concentration; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at **099**. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

D.3. Special Sampling & Analytical Procedure – SP 008, 011

The permittee shall monitor sampling points **008 and 011** for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.4. Special Sampling & Analytical Procedure – SP 912

Discharges at sampling point **912** shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.5. Special Sampling & Analytical Procedure – SP 938

Since the operation at Sample Point **938** is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

D.6. Special Sampling & Analytical Procedure – SP 080, 936

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points **080 and 936**; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

E. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

E.1. Sampling Not Required at Non-Toxic / Low-Flow Point – SP 001, 002

The permittee is not required to sample discharges at sampling points **001 and 002**, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

E.2. Sampling Not Required at Connections w/ NO Sample Point & w/ Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

E.3. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

E.4. Certification of No CN Under 439 - SP 080, 915, 936

The permittee has determined in report dated May 17, 2015, that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points **080, 915, and 936**. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

E.5. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

E.6. Report Results Under Mass Discharge Limits – SP 905

The limitations at sampling point **905** are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

E.7. Special Certification & Reporting Requirement – SP 930, 933, 936

For sampling points **930, 933, and 936** permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points **930, 933, and 936** are adhered to.

E.8. Determination of Absence of Regulated Pollutants

The permittee has determined in report dated May 17, 2015, that: (1) two pollutants (diethyl amine and triethyl amine), regulated under 40 CFR 439, Subpart C, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are neither used nor generated in regulated categorical operations at the permitted facility. The permittee must maintain the documentation for this

determination in the facility permit records, for a period of at least three (3) years following expiration of this permit.

An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, and including at least one sampling of the permittee's regulated categorical process wastewater prior to any treatment present at the facility, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

E.9. Absence Certification 439 Pollutants & Once per Year Self-Monitoring – SP 915,930,936

Based on the determination referenced above and on permittee's verification dated May 17, 2015, that: (1) two pollutants (diethyl amine and triethyl amine), regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points **915 and 936**, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling point **930**, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

E.10. 439 Surrogate Recommendation & Certification – SP 920, 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation, in report dated May 17, 2015, to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points **920 and 937**. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

E.11. Reporting Continuous pH Monitoring Data - SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point **010**, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

E.12. Certification Requirement for Sample Points with less than Quarterly Sample Frequency – SP 930

At sampling point **930**, permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, the permittee shall certify on the quarterly self-monitoring report that there has been no change in the character of the wastes discharged at sampling point **930** since the last report.

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT LLC.**

Permit No: 1011728100-2 Effective Date: 6/1/2015 Expiration Date: 5/31/2020

Premise Address: 3600 N. Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002 and 930**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, and 936,** subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points **915 and 930 and 936,** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

March 25, 2015

Brett Shank, EHS Manager
MALLINCKRODT LLC
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 - 2
For premise at: 3600 N. Second Street, St. Louis, MO 63147

Dear Mr. Shank:

The Metropolitan St. Louis Sewer District has completed its review of your application for renewal of the Industrial Wastewater Discharge Permit for the above premise. The current permit expires on May 31, 2015.

Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the draft permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include:

- At SP930, self-monitoring reduced from quarterly to annually for all pollutants, due to a certification statement and low levels in the sample data. Special Condition E.9 and E.12, and Special Certifications A and H now include a reference to SP930.
- At SP905, because the flowrate estimate has been reduced by about 40 percent, all of the mass discharge limits have been reduced by the same.

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the draft permit, and we will proceed to issue the final permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Draft Industrial Wastewater Discharge Permit

cc: Doug Mendoza
Tom Boehm

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 - 2

EFFECTIVE DATE: June 01, 2015
EXPIRATION DATE: May 31, 2020

ISSUED TO: MALLINCKRODT LLC
3600 N Second Street
St. Louis, MO 63147

SIC NUMBER(S): 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 20
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DRAFT

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrehan, 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,000

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of Bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of Bldg 91

AVERAGE WASTEWATER FLOW (GPD): 20,327

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Categorical Process Waste (Machine shop, painting, parts washing) + Laboratory Waste (439 Sub E NA (No Stds)) + Flow From Offsite (From SP 009) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of Bldg #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 18,336

WASTEWATER SOURCE AND CATEGORY: Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Non-Contact Cooling Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of Bldg T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Pump station bypass to Salisbury trunk) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type**	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt Street, 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 7,700

WASTEWATER SOURCE AND CATEGORY: Flow from Offsite (Offsite W of Broadway) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit*	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH with square lid 50' N of neutralization control Bldg at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 739,523

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Contact Cooling Water (Includes CT blowdown) + Plant & Equipment Washdown (General) + Boiler Blowdown + Regeneration/Reject Water + Categorical (905,912,915,920,927,930,933,936,937,938) + Storm Water + Laboratory Waste (Both QC and R+D) + Kitchen Waste + Process Waste (Garage) + Plant & Equipment Washdown (General)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
Cyanide Amenable to Chlorination [mg/L]	1.2	Instant	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of Bldg 223, under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Overflow from Plant 5) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of Bldg # 98

AVERAGE WASTEWATER FLOW (GPD): 2,507

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no)) + Laboratory Waste(439 Sub E NA (No Stds) & non-439 R&D) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo

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Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

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** See Section I.A.2 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 12,627

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non-Categorical Process Waste + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside Bldg X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 60,676

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	182	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	45	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	14	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	5	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	29	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	7	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	14	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	5	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	14	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	5	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	182	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	182	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	132	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	41	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	182	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	45	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	87	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	15	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	53	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	18	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	64	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	132	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	37	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	11	Daily Max	Once/3 mo
Acenaphthene [g/Day]	4	Monthly Avg	Once/3 mo
Anthracene [g/Day]	11	Daily Max	Once/3 mo
Anthracene [g/Day]	4	Monthly Avg	Once/3 mo
Benzene [g/Day]	13	Monthly Avg	Once/3 mo
Benzene [g/Day]	31	Daily Max	Once/3 mo

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Bis (2-EthylHexyl) Phthalate [g/Day]	22	Monthly Avg	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	59	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	33	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	87	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	33	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	87	Daily Max	Once/3 mo
Chloroethane [g/Day]	25	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	68	Daily Max	Once/3 mo
Chloroform [g/Day]	25	Monthly Avg	Once/3 mo
Chloroform [g/Day]	75	Daily Max	Once/3 mo
Chloromethane [g/Day]	25	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	68	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	10	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	5	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	11	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	26	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	11	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	4	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	33	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	87	Daily Max	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Fluoranthene [g/Day]	12	Daily Max	Once/3 mo
Fluoranthene [g/Day]	5	Monthly Avg	Once/3 mo
Fluorene [g/Day]	11	Daily Max	Once/3 mo
Fluorene [g/Day]	4	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	182	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	45	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	33	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	87	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	182	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	45	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	39	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	8	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	11	Daily Max	Once/3 mo
Naphthalene [g/Day]	4	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	1470	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	514	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	11	Daily Max	Once/3 mo
Phenanthrene [g/Day]	4	Monthly Avg	Once/3 mo
Pyrene [g/Day]	11	Daily Max	Once/3 mo
Pyrene [g/Day]	5	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	12	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	38	Daily Max	Once/3 mo
Toluene [g/Day]	17	Daily Max	Once/3 mo
Toluene [g/Day]	6	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	15	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	6	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	16	Daily Max	Once/3 mo
Trichloroethene [g/Day]	6	Monthly Avg	Once/3 mo

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Vinyl Chloride [g/Day]	22	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	40	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank # 450 on SE corner of Bldg 504

AVERAGE WASTEWATER FLOW (GPD): 114,067

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
N,N-Dimethyl Acetamide [LB/DY]	5459	Monthly Avg	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Max	Once/mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DRAFT

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of Bldg 6

AVERAGE WASTEWATER FLOW (GPD): 4,746

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ammonia (as N)	*****	Daily Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Temperature	*****	Daily Avg	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

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Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** Monitoring requirement only.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of Bldg 512

AVERAGE WASTEWATER FLOW (GPD): 38,021

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit*	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in Bldg 6

AVERAGE WASTEWATER FLOW (GPD): 4,746

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit*	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 550

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/year
Acetone [mg/L]	8.2	Monthly Avg	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/year
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/year
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/year
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/year
Methylene Chloride [mg/L]	3.0	Daily Max	Once/year
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/year
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 77

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydro-generator bldg 8' from S wall in SE corner of Bldg 260

AVERAGE WASTEWATER FLOW (GPD): 13,957

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

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Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of Bldg 501

AVERAGE WASTEWATER FLOW (GPD): 65,820

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Bldg 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 40

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

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PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

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4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by October 28, 2015. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

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10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

DRAFT

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

DRAFT

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

DRAFT

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. SPECIAL BILLING REPORTING REQUIREMENTS

A.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Wastewater User Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on **ninety-six (96) percent** of the used water (on an annual basis) being discharged to the District from account number 118821. The permittee shall notify the District's Division of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

A.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Wastewater User Charge Ordinances, the permittee is currently subject to extra-strength surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and/or Total Suspended Solids (TSS). The permittee's current surcharge billing values are: **520** mg/l for BOD; **1039** mg/l for COD; and **112** mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

B. PROHIBITED DISCHARGES

B.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point **905**. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point **905**.

C. DERIVATION OF LIMITATIONS

C.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

DRAFT

D. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

D.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point **009** and "downstream" sampling point **003**. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point **099**. Permittee shall perform monitoring at both **009** and **003** within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at **099**, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate UF = upstream flow rate
DC = downstream concentration UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at **099**. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

D.3. Special Sampling & Analytical Procedure – SP 008, 011

The permittee shall monitor sampling points **008 and 011** for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.4. Special Sampling & Analytical Procedure – SP 912

Discharges at sampling point **912** shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.5. Special Sampling & Analytical Procedure – SP 938

Since the operation at Sample Point **938** is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

DRAFT

D.6. Special Sampling & Analytical Procedure – SP 080, 936

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points **080 and 936**; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

E. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

E.1. Sampling Not Required at Non-Toxic / Low-Flow Point – SP 001, 002

The permittee is not required to sample discharges at sampling points **001 and 002**, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

E.2. Sampling Not Required at Connections w/ NO Sample Point & w/ Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

E.3. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined by the District that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

E.4. Certification of No CN Under 439 - SP 080, 915, 936

The permittee has determined in report dated May 17, 2015, that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points **080, 915, and 936**. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

DRAFT

E.5. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

E.6. Report Results Under Mass Discharge Limits – SP 905

The limitations at sampling point **905** are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

E.7. Special Certification & Reporting Requirement – SP 930, 933, 936

For sampling points **930, 933, and 936** permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points **930, 933, and 936** are adhered to.

E.8. Determination of Absence of Regulated Pollutants

The permittee has determined in report dated May 17, 2015, that: (1) two pollutants (diethyl amine and triethyl amine), regulated under 40 CFR 439, Subpart C, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are neither used nor generated in regulated categorical operations at the permitted facility. The permittee must maintain the documentation for this

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determination in the facility permit records, for a period of at least three (3) years following expiration of this permit.

An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, and including at least one sampling of the permittee's regulated categorical process wastewater prior to any treatment present at the facility, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

E.9. Absence Certification 439 Pollutants & Once per Year Self-Monitoring – SP 915,930,936

Based on the determination referenced above and on permittee's verification dated May 17, 2015, that: (1) two pollutants (diethyl amine and triethyl amine), regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points **915 and 936**, and (2) all pollutants (acetone, ethyl acetate, isopropyl acetate, n-amyl acetate, and methylene chloride), regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling point **930**, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

E.10. 439 Surrogate Recommendation & Certification – SP 920, 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation, in report dated May 17, 2015, to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points **920 and 937**. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

E.11. Reporting Continuous pH Monitoring Data - SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point **010**, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

E.12. Certification Requirement for Sample Points with less than Quarterly Sample Frequency – SP 930

At sampling point **930**, permittee is required to sample the discharge only once per year. For the quarters in which no sampling is performed, the permittee shall certify on the quarterly self-monitoring report that there has been no change in the character of the wastes discharged at sampling point **930** since the last report.

THIS IS THE LAST PAGE OF THIS PERMIT

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METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT LLC.**

Permit No: 1011728100-2 Effective Date: 6/1/2015 Expiration Date: 5/31/2020

Premise Address: 3600 N. Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002 and 930**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, and 936**, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points **915 and 930 and 936**, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated March 17, 2015, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT FACT SHEET

Check one:
FIRST TIME PERMIT ☐
RENEWAL ☒

Prepared by: S. Rehmer	Date: 3/13/2015
Reviewed by:	Date: 3-25-15

PERMIT NO: 1011728100-2 EFFECTIVE DATE: 6/1/2015 EXPIRATION DATE: 5/31/2020

COMPANY NAME: MALLINCKRODT LLC

PREMISE ADDRESS: 3600 N. Second Street, 63147

RELATED ACCOUNT NUMBERS: n/a

TYPE OF OPERATION: Manufacturer of pharmaceuticals

TOTAL NUMBER OF SAMPLING POINTS: 20 or NO SAMPLING POINT ☐

NUMBER OF: ORDINANCE 9 CATEGORICAL 10 COMBINED 1

CATEGORICAL INDUSTRY? YES ☒ NO ☐

If Yes, 40 CFR 414 Subpart G + H PSES ☒ PSNS ☐

40 CFR 439 Subpart B-PSES; C-PSES; D-PSNS PSES ☒ PSNS ☒

EXTRA STRENGTH SURCHARGE? YES ☒ NO ☐ If Yes, BOD 520 COD 1039 TSS 112

RETURN FACTOR? YES ☒ NO ☐ If Yes, Acct #(s) 118821 RF 0.96

SPECIAL CONDITIONS REQUIRED? YES ☒ NO ☐

All SMR start dates begin at start of calendar quarter: ☐ same as/containing permit effective date
☒ following permit effective date

SMR General Cert. B attached to first permit SP (001) at reporting frequency of once/3mo? Y ☒ N ☐

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Pollutant & Limitations Documentation Sheets:	☒	☐	
Permit Preparation Checklist:	☒	☐	
Production-based Standards Calc. Sheets (for Sampling Points _____)	☐	☐	☒
Mass-based Standards Calc. Sheets (for Sampling Points 905)	☒	☐	☐
Equivalent Concentration Limits Sheets (for Sampling Points _____)	☐	☐	☒
Most Strict Limits Sheets (for Sampling Points _____)	☐	☐	☒
Combined Wastestream Formula Sheets (for Sampling Points _____)	☐	☐	☒
Text of any Custom Special Cond's: If Yes, for which SCs: D.12(x4); E.21(x1)	☒	☐	☐

Other: Letter from Mallinckrodt, received 3/17/15, for absent & surrogate cert for E.22, E.24, and E.35; e-mail from Mallinckrodt, received 3/24/15, requesting to remain with mass limits at SP905.

COMMENTS (Include notations of any significant changes from last permit):
At SP930, self-monitoring was quarterly, now annually for all pollutants, due to cert statement received on 3/17/15, and all sample data shows absence; also, SP905 volume down, thus mass limits reduced.

PERMIT NO: 1011728100-2

SPECIAL CONDITIONS NOT TIED TO SPECIFIC SAMPLE POINTS

Special Condition:	# F.1	# F.2	# E.18	# E.5	# B.1	# C.6	# _____	# _____
List any related SMR certifications:	# _____	# _____	# _____	# B	# E	# _____	# _____	# _____
SMR certification frequency:	[none]	[none]	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]
List any related General Reports:	# _____	# _____	# RAD	# _____	# _____	# _____	# _____	# _____
General Report frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]

Are all the SMR certifications listed above associated with first permit sample point (001)? YES ☒ NO ☐ N/A (No Certs) ☐

Check here if there are no non-SP-specific Special Conditions: ☐

MSD 015663

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 001 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary + Storm water

Flow Rate: 1,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015664

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 002 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary

Flow Rate: 2,200 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	☐
BOD			[none]		☐
COD			[none]		
O&G			[none]		
pH			[none]		
Temp			[none]		☐
TSS			[none]		
Ord. TTO			[none]		☐
			[none]		☐
			[none]		
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015665

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 003 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Downstream"), Sanitary, Non-cat process, Lab ww, flow from offsite (009), Storm water

Flow Rate: 20,327 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	No limits	once 3 mo	Standard + high volume	
pH	Standard	No limits	once 3 mo	Standard + high volume	
Temp	Standard	No limits	once 3 mo	Standard + high volume	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015666

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 005 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Lab ww, NCCW

Flow Rate: 18,336 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Standard	Ord. 12559	once 3 mo	Standard + high volume	
Temp	Standard	Ord. 12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015667

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 008 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass (pump station), Storm water

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ (Avg flow rate = 0 gpd; max = 1.4 M gpd)

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12a	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015668

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 009 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Upstream"), Flow from offsite (W of Broadway), Storm water

Flow Rate: 7,700 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	[none]	Standard	
BOD	Standard	No limits	[none]	Standard + high volume	☐
COD	Standard	No limits	[none]	Standard + high volume	☐
O&G	Standard	No limits	[none]	Standard + high volume	
pH	Standard	No limits	[none]	Standard + high volume	
Temp	Standard	No limits	[none]	Standard + high volume	
TSS	Standard	No limits	[none]	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015669

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 010 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Categorical (from 905, 912, 915, 920, 927, 930, 933, 936, 937, 938), Sanitary, NCCW, P&E wash, Boiler blow, Regen/Reject, Storm, Lab ww, Kitchen ww, P&E wash, Process (garage)

Flow Rate: 739,523 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Standard	Ord. 12559	once 3 mo	Standard + high volume	
Temp	Standard	Ord. 12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Cr (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Cu (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Ni (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
Zn (t)	KP + data shows presence	Ord. 12559	once 3 mo	Volume + KP + discharge component	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# E.29	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# cont-pH	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 011 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass (overflow from Plant 5), Storm water

Flow Rate: 0 Units: GPD Basis for Flow Rate: IUQ (Avg flow rate = 0 gpd; max = 14 k-gpd)

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12a	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015671

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 080 **TYPE:** Ord ☐ Cat ☐ Comb ☒

Wastewater Components: Cat (439 Sub C PSES), Lab waste, Storm water

Flow Rate: 2,507 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard	
pH	Standard	Ord. 12559	once 3 mo	Standard	
Temp	Standard	Ord. 12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
24 (no CN or NH3)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12d	# E.15	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# F	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 099 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: ("Difference between up & down"), Sanitary, Non-cat process, Lab ww, flow from offsite (009), Storm water

Flow Rate: 12,627 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	Ord. 12559	once 3 mo	Standard + high volume	
pH	Excluded for up/down	No limits	[none]	[none]	
Temp	Excluded for up/down	No limits	[none]	[none]	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	Ord. 12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# E.9	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015673

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 905 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (414 Sub G + H, PSES)

Flow Rate: 60,676 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
OCPSF list of 42	Categorical	414, Sub G+H, PSES	once 3 mo	Categorical + high volume	☐
pollutants			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.19	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☒ NO ☐ Explain: The volume was 100,000 gpd; thus the mass limits have all been reduced ~ 40 percent.

MSD 015674

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 912 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Non-cat process ww (from bldgs 504+505)

Flow Rate: 114,067 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard; required for mass limit calc's	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
DMAC	Nature of production	MSD-derived limits	once/mo	Production based	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12b	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015675

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 915 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 4,746 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm long list of 24 (no CN or NH3)	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
Diethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
Triethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.22	# E.15	# E.35	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015676

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 920 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 38,021 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume	☐
Toluene	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume + KP	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.24	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# __I__	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015677

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 927 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 4,746 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once 3 mo	Categorical + high volume	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
List related SMR certs:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ___	# ___	# ___	# ___	# ___	# ___	# ___	# ___
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ___

MSD 015678

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 930 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 550 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	☐
BOD			[none]		☐
COD			[none]		
O&G			[none]		
pH			[none]		
Temp			[none]		☐
TSS			[none]		
Ord. TTO			[none]		☐
			[none]		☐
			[none]		
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once/year	Categorical + certified absence + sample data shows < DL for all five.	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.21	# E.22	# E.35	# E.4	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# H	# A	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☒ NO ☐ Explain: Self-monitoring was quarterly, now annually for all pollutants; included Cert A.

MSD 015679

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 933 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B, PSES)

Flow Rate: 77 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharm list of 5	Categorical	439 Sub B, PSES	once 3 mo	Categorical + nature of ww	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.21	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 936 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 13,957 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	☐
BOD			[none]		☐
COD			[none]		
O&G			[none]		
pH			[none]		
Temp			[none]		☐
TSS			[none]		
Ord. TTO			[none]		☐
			[none]		☐
			[none]		
PRIORITY/CATEGORICAL:					
Pharm long list of 24 (no CN or NH3)	Categorical	439 Sub C PSES	once 3 mo	Categorical plus volume	☐
Diethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
Triethyl amine	Categorical	439 Sub C PSES	once/year	Not in process ww, data < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12d	# E.21	# E.22	# E.15	# E.35	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015681

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 937 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 65,820 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume	☐
Toluene	Categorical	439 Sub C, PSES	once 3 mo	Categorical + high volume + KP	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.24	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# I	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

PERMIT NO: 1011728100-2

SAMPLING POINT REFERENCE NUMBER: 938 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub D, PSNS)

Flow Rate: 40 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	☐
BOD			[none]		☐
COD			[none]		
O&G			[none]		
pH			[none]		
Temp			[none]		☐
TSS			[none]		
Ord. TTO			[none]		☐
			[none]		☐
			[none]		
PRIORITY/CATEGORICAL:					☐
Pharm list of 5	Categorical	439 Sub D, PSES	once 3 mo	Categorical + nature of ww	☐
(acetone, ethyl acetate, isopropyl acetate, methylene chloride, n-amyl acetate)			[none]		
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12c	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015683

PERMIT PREPARATION CHECKLIST – PART 1
(Fact Sheet Attachment)

Company Name: MALLINCKRODT LLC

Permit No.: 1011728100-2

Effective Date: 6/1/2015 Prepared by: S. REHMER Date: 3/13/2015

REVIEW THE PRETREATMENT DATABASE (PIMS), INDUSTRY FILE AND PERMIT APPLICATION. ANSWER THESE QUESTIONS & UPDATE THE DATABASE PRIOR TO DEVELOPING THE DRAFT PERMIT.

1. Are the correct SICs listed? Yes ☒ No ☐
   If no, add _____ delete: _____

2. Is user in surcharge? Yes ☒ No ☐
   If yes, date last certified: 9/30/2013
   If yes, Special Condition F.2 applies.

3. Does user's premise have more than one MSD account? Yes ☐ No ☒
   If yes, were all account numbers correctly listed (including occupant #s)? Yes ☐ No ☐
   If no, have account numbers been corrected in database before proceeding? Yes ☐ No ☐

4. Does user have a Return Factor (RF) other than 1.00 for any account? Yes ☒ No ☐
   If yes, list acct no., RF and date last updated:
   Acct 00118821 RF 0.96 Updated 1/28/2002
   Acct _____ RF _____ Updated _____
   If yes, Special Condition F.1 applies.

5. Does user discharge water from a source not included in the MSD Billing system? Yes ☐ No ☒
   If yes, Special Condition F.3 & General Report "Discharge Volume for Billing" apply.

6. Have you established agreement among permit application, water consumption records and PIMS on component flows at each SP, total SP flows and total premise flow? Yes ☒ No ☐
   If no, explain _____

7. Has user been granted any variances from ordinance limitations? Yes ☐ No ☒
   If yes, Application Date: _____
   Approval Date: _____, or approved as part of this permit issuance? Yes ☐
   (Variances cannot last more than 5 years after approval)
   If yes, Parameter(s) _____ at SP(s) _____
   If yes, Special Condition C.4 applies.

8. Have any numerical limitations been applied to user, in addition to those already contained in the ordinance? Yes ☐ No ☒
   If yes, Parameter(s) _____ at SP(s) _____
   Date limit(s) originally applied: _____, or as part of variance above? ☐
   If yes, are Special Conditions, other than the standard special conditions, required? Yes ☐ No ☐
   If yes, explain under "non-standard special conditions" question below.

9. Does user discharge any radioactive materials? Yes ☒ No ☐
   If yes, Special Condition E.18 & General Report "Radiation Discharge" apply.

10. Does user generate wastes and/or wastewater by genetic engineering research? Yes ☐ No ☒
    If yes, Special Condition B.12 applies.

11. Do all of the user's active connections, to MSD sewers, have identified SPs? Yes ☐ No ☒
    If no, explain: unknown number of laterals & connections
    If no, is documentation sufficient to use Special Condition Yes ☒ No ☐
    E.5 ☒ "Sampling Not Required at Connections with NO SP and with SP on parts",
    E.6 ☐ "Sampling Not Required at Connection with NO SP on it",
    E.7 ☐ "Sampling Not Required at Connection with SP on only part of it", or
    E.8 ☐ "Sampling Not Required at Permittee with No SP"?
    If no, is compliance schedule necessary to obtain documentation? Yes ☐ No ☐
    If yes, Special Condition G.1 is necessary.

12. Does premise require use of "upstream/downstream" sampling? Yes ☒ No ☐
    If yes, Upstream SP # 009 & Downstream SP # 003
    If yes, Special Conditions D.11 and E.9 apply.

13. Are there any inactive connections to MSD sewers? Yes ☐ No ☒
    If yes, Special Condition E10 applies.

14. Have you verified, in PIMS, the SP location descriptions are complete and adequate? Yes ☒ No ☐

15. Have you verified, in PIMS, the discharge components, process descriptions and related flows at all SPs, are complete and adequate? Yes ☒ No ☐

16. Does user have any discharges subject to NPDES permitting regulations? Yes ☐ No ☒
If yes, list MSD points & corresponding NPDES points: _____
If yes, Special Condition E.14 applies.

17. Do any SPs convey stormwater in addition to regulated wastewater? Yes ☒ No ☐
If yes, list points: 003, 008, 009, 010, 011, 080, 099 and note on P&LD sheets.
If yes, Special Condition D.10 applies.

18. Are any SPs Dry Justified in PIMS? Yes ☐ No ☒
If yes, list points _____ and note on P&LD sheets.
If yes, no self-monitoring is required, and Special Condition E.3 applies.

19. Are there SPs where user discharges only non-process wastewater? Yes ☒ No ☐
If yes, does no self-monitoring requirement / Special Condition E.3 apply? Yes ☒ No ☐
If yes, list points 001, 002 and note on P&LD sheets.

20. Are there SPs with infrequent discharges that require coordination with the user for MSD to collect samples? Yes ☐ No ☒
If yes, list points: _____ and note on P&LD sheets.
If yes, Special Condition D.14 applies.

21. Is documentation adequate to allow use of grab samples in lieu of composites at any SPs? Yes ☐ No ☒
If yes, list points _____ and note on P&LD sheets.
If yes, Special Condition D.1 applies.

22. Are there SPs with self-monitoring requirements, but at less than a quarterly frequency, for all parameters? Yes ☒ No ☐
If yes, list points 930 and note on P&LD sheets.
If yes, Special Condition E.4 applies.

23. Can local limits TTO be removed from monitoring at any ordinance SPs? Yes ☐ No ☒
If yes, list points _____ and explain on P&LD sheets.
If yes, does TTO also need to be removed from MSD's monitoring? Yes ☐ No ☐
If yes, discuss with inspector (name: _____) and explain why it had been monitored by MSD: _____

24. Does user have a history of compliance problems at this or a previous location? Yes ☐ No ☒
If yes, explain problems: _____
If yes, is a compliance schedule required? Yes ☐ No ☐
If yes, Special Condition G.1 applies.
Is supporting documentation attached? Yes ☐ No ☐
If yes, are any other special requirements required? Yes ☐ No ☐
Explain: _____

25. Is user required to monitor for Total Phenols at an ordinance SP? Yes ☐ No ☒
If yes, does Special Condition D.3 for Total Phenols monitoring options apply? Yes ☐ No ☐

26. Has user chosen to employ continuous monitoring techniques for:
pH? If yes, list points 010. SC E.29 & Gen Rpt "Cont-Mon pH Excursions" apply. Yes ☒ No ☐
Temp? If yes, list points _____. SC E.30 & Gen Rpt "Cont-Mon Temp Excursions" apply. Yes ☐ No ☐
LEL? If yes, list points _____. SC E.31 & Gen Rpt "Cont-Mon LEL Excursions" apply. Yes ☐ No ☐
If yes for pH or Temp, have corresponding SP limits in PIMS been set to 'Alert Only' and does PIMS Monitoring Special Instructions have notes re. field 'violations'? Yes ☐ No ☐

27. Does the company perform any processes for which summaries of activities are needed? Yes ☐ No ☒
If yes, Special Condition E.33 & General Report "Process Activity Summary" apply.

28. Are special billing conditions, other than the standard Special Conditions, needed? Yes ☐ No ☒
If yes, describe: _____
If yes, Special Condition F.4 applies.
Does General Report "Discharge Volume for Billing" apply? Yes ☐ No ☐
Does General Report "Custom Non-Standard" apply? Yes ☐ No ☐

29. Are any Special Conditions, other than the standard special conditions, required? Yes ☒ No ☐
If yes, explain: FIVE (see attached memo)
Which Special Condition applies? D.12(x4); E.21(x1)
Is supporting documentation attached? Yes ☒ No ☐
If no, explain: _____
Does General Report "Custom Non-Standard" apply? Yes ☒ No ☐

30. Is user a hauled waste industry, discharging its wastewater at the Hauled Waste Station? Yes ☐ No ☒
If yes, have permit title, cover page language, & general conditions been modified? Yes ☐ No ☐
If yes, Special Conditions B.9, D.13, H.1, and H.2 apply.

31. Is user classified as a Categorical Industrial User (CIU)? Yes ☒ No ☐
If yes, complete part 2 of checklist. If no, STOP here.

List all the Special Conditions from Part 1 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
	F.2	n/a
	F.1	n/a
RAD.discharge	E.18	n/a
	E.5	n/a
	D.11	003, 009, 099
	E.9	003, 009, 099
	D.10	003, 008, 009, 010, 011, 080, 099
	E.3	001, 002
Cont-Mon.pH	E.29	010
	D.12a	008, 011
	D.12b	**912**
	D.12c	**938**
	D.12d	**080, 936**
	E.21	**930, 933, 936**
	E.4	**930**

PERMIT PREPARATION CHECKLIST – PART 2
(Fact Sheet Attachment)

Company Name: MALLINCKRODT LLC

Permit No.: 1011728100-2

Effective Date: 6/1/2015 Prepared by: S. REHMER

Date: 3/13/2015

32. Do any SPs have both Ordinance & Categorical limits? Yes ☒ No ☐
If yes, which sampling point(s): 080; not applicable, due to no overlapping pollutants.
If yes, Special Condition C.3 is applicable.
Is Most-Strict Limits worksheet attached? Yes ☐ No ☒

33. Is the Combined Wastestream Formula (CWF) required? Yes ☐ No ☒
If yes, which sampling point(s): _____
If yes, date calculated (will differ from permit date/date applied): _____
If yes, Special Condition C.2 is applicable.
Is Combined Wastestream Formula worksheet attached? Yes ☐ No ☐

34. Are categorical limitations based on production rates? Yes ☐ No ☒
If yes, which sampling point(s): _____
If yes, which 40 CFR Part _____, Subpart _____, ES/NS _____.
If yes, date calculated (will differ from permit date/date applied): _____
If yes Special Conditions C.1, E.1, and E.2 apply
If yes, General Report "Production Rates"applies. Yes ☐ No ☐
Is Production-based Standards Calculation sheet attached?

35. Are categorical limitations mass limits? Yes ☒ No ☐
If yes, which sampling point(s): 905
If yes, which 40 CFR Part 414, Subpart G+H, ES/NS ES. Yes ☒ No ☐
If yes, has user requested use of equivalent concentration-based limits and submitted corresponding request form? Yes ☐ No ☒
If yes, have facility inspections verified that dilution is not being substituted for treatment?
If yes, Special Condition E.36 is applicable. Yes ☐ No ☐
Source/location for equiv. conc. limits: 40 CFR _____.
If no, mass-based limits must be calculated. See below.
If no, date mass-based limits calculated
(will differ from permit date/date applied): 3/13/2015
If no, Special Condition E.19 is applicable. Yes ☒ No ☐
Is Mass-based Standards Calculation sheet attached?

36. Does user perform categorical operations, without a wastewater discharge? Yes ☒ No ☐
If yes, which 40 CFR Part 414, Subpart G+H, ES/NS ES.
If yes, which Special Condition applies?
B.1 ☒ "Categorical Waste Discharge Prohibited",
B.2 ☐ "No Stds Existing Source Cat Waste Discharge Not Authorized", or
N/A ☐ Explain: _____

37. Has user certified to the absence of specific regulated categorical pollutants? Yes ☒ No ☐
If yes, is user a pharmaceutical manufacturer subject to 40 CFR 439? Yes ☒ No ☐
If no, Special Conditions E.22 & E.23 (no self-mon) are applicable.
If yes (subject to 439), are there any "absent" pollutants other than cyanide? Yes ☒ No ☐
If yes, SCs E.22 & E.35 (once/yr self-mon) are applicable for non-CN polls.
For absence of cyanide, see Q.44.
Certification date: 3/17/15 (Must submit new certification for each permit) Yes ☒ No ☐
List absent pollutants: Diethyl amine & Triethyl amine at SP 915 + 936; all five 439-B pollutants at SP 930.
Were all these pollutants non-detect in past monitoring?
If no, explain: _____
(including if pollutants were compared to intake water levels or determined to be solely from sanitary wastewater) Yes ☒ No ☐
Have "alert-only" detection level limits for absent pollutants been added to database, for verification purposes?

38. Is user a job shop electroplater with >10,000 gpd subject to 40 CFR 413? Yes ☐ No ☒
If yes, Special Condition D.2 is applicable.

39. Is user a new source soap and detergent manufacturer subject to 40 CFR 417? Yes ☐ No ☒
If yes, is user subject to Subparts O ☐, P ☐, Q ☐, or R ☐? Yes ☐ No ☐
If yes, for Subpart O, Special Condition B.4 is applicable.
If yes, for Subpart P, Special Condition B.5 is applicable.
If yes, for Subpart Q, Special Condition B.6 is applicable.
If yes, for Subpart R, Special Condition B.7 is applicable.

40. Is user a leather tanner/finisher subject to 40 CFR 425? Yes ☐ No ☒
If yes, is user subject to subpart C (Appendix B)? Yes ☐ No ☐
If yes, Special Condition D.7 is applicable.
If no, Special Condition D.6 is applicable.

41. Is user a pulp, paper, and paperboard company subject to 40 CFR 430? Yes ☐ No ☒
If yes, is user subject to a subpart allowing certification for absence of biocides? Yes ☐ No ☐
If yes, for which subpart: _____
If yes, has user certified to the absence of biocides? Yes ☐ No ☐
If yes, Special Condition E.32 is applicable.

42. Is user a metal finisher subject to 40 CFR 433? Yes ☐ No ☒
If yes, does it use cyanide in its 433 operations? Yes ☐ No ☐
If yes, does user have a separate cyanide sample point after treatment and prior to dilution with other streams? Yes ☐ No ☐
If no, modified Special Condition C.2 for cyanide limit is applicable.
Is CWF worksheet attached? Yes ☐ No ☐

43. Is user a Centralized Waste Treater subject to 40 CFR 437? Yes ☐ No ☒
If yes, does it performs operations subject to Subpart(s) A ☐, B ☐ or C ☐? Yes ☐ No ☐
If subject to multiple Subparts, has user requested and been approved for application of Subpart D standards? Yes ☐ No ☐
If yes, Special Conditions E.25 and E.26 are applicable.
If no, have separate sample points been established for each Subpart? Yes ☐ No ☐
If subject to 40 CFR 437, does user receive any waste that contains cyanide at a concentration greater than 136 mg/l? Yes ☐ No ☐
If yes, does user have a separate cyanide sample point after treatment and prior to dilution with other streams? Yes ☐ No ☐
If no, modified Special Condition C.2 for cyanide limit is applicable.
Is CWF worksheet attached? Yes ☐ No ☐
If subject to 40 CFR 437, SC E.33 & General Rpt "Process Activity Summary" apply.
If subject to 40 CFR 437, SC F.3 & General Rpt "Discharge Volume for Billing" apply.

44. Is user a pharmaceutical manufacturer subject to 40 CFR 439? Yes ☒ No ☐
If yes, has user requested, and been approved for, the use of surrogate pollutants for monitoring? Yes ☒ No ☐
Request date: 3/17/15 (Must submit new request for each permit)
List high strippability surrogate: Toluene
List medium strippability surrogate: Tetrahydrofuran
If yes, Special Condition E.24 is applicable.
If yes, is user subject to Subpart A or C? Yes ☒ No ☐
If yes, has user certified to the absence of cyanide? Yes ☒ No ☐
If yes, Special Conditions E.22 & E.15 (no self-mon) are applicable.
Certification date: 12/1/14 (Must submit new certification for each permit)
If no, must total cyanide limitations be adjusted? Yes ☐ No ☒
If yes, calculate adjusted limitations. Is worksheet attached? Yes ☐ No ☐
If yes, does user discharge to a Treatment Plant with nitrification capability, as defined at 40 CFR 439.1(i)? Yes ☒ No ☐
If yes, Special Condition C.6 is applicable (ammonia limit doesn't apply).

45. Is user a pesticide formulator/packager/repackager subject to 40 CFR 455? Yes ☐ No ☒
If yes, has user requested and been approved for the pollution prevention allowable discharge option? Yes ☐ No ☐
If yes, Special Conditions E.27 and E.28 are applicable.
If no, Special Condition B.11 is applicable.
If yes, does user have DOT aerosol leak test bath water from non-continuous overflow baths (batch baths)? Yes ☐ No ☐
If yes, Special Condition E.34 & General Report "Reporting Aerosol Leak Test

Bath Water Discharges" apply

46. Is user a metal molder/caster subject to 40 CFR 464? Yes ☐ No ☒
    If yes, Special Condition D.4 is applicable.

47. Is user a coil coater subject to 40 CFR 465? Yes ☐ No ☒
    If yes, is user subject to 40 CFR 465 Subpart(s) A ☐, B ☐, or C ☐? Yes ☐ No ☐
    If yes, Special Condition E.16 is applicable.
    If yes, is user subject to 40 CFR 465 Subpart D? Yes ☐ No ☐
    If yes, Special Conditions D.5, D.9, and E.17 are applicable.
    If yes, is there a separate categorical SP for the regulated waste? Yes ☐ No ☐
    If yes, include O&G (Hydrocarbon) in the list of parameters at the categorical SP.
    If no, and categorical waste discharges at a combined ord/cat SP point, include O&G (Total) and O&G (Hydrocarbon) in the list of parameters at the combined SP.

48. Can user certify, in lieu of monitoring, for categorical TTO at a categorical or combined SP? Yes ☐ No ☒
    If yes which SP(s): _____
    If yes Spec Cond E.11 (categorical) ☐ or E.12 (combined) ☐ is applicable.

49. Do any sampling points have both Ordinance & Categorical TTO limits? Yes ☐ No ☒
    If yes, which SP(s): _____
    Is Special Condition E.13 (for TTO's derived from different definitions) applicable? Yes ☐ No ☐
    If yes, explain: _____.

50. May user monitor for Oil & Grease, in lieu of TTO, at a categorical or combined SP? Yes ☐ No ☒
    If yes, which SP(s): _____
    If yes, Special Condition D.8 is applicable.
    If yes, is a modification of Special Condition E.13 applicable? Yes ☐ No ☐

51. Does user perform any categorical operations for which the specific category has not already been listed above? Yes ☐ No ☒
    If yes, which 40 CFR Part _____, Subpart _____, ES/NS _____.
    If yes, do any Special Conditions apply that are not already noted above? Yes ☐ No ☐
    If yes, explain: _____
    If yes, do any General Reports apply that are not already noted above? Yes ☐ No ☐
    If yes, explain: _____

List all the Special Conditions from Part 2 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
	E.19	905
	B.1	n/a
	E.22	915, 930, 936
	E.15	080, 915, 936
	E.24	920, 937
	E.35	915, 930, 936
	C.6	**n/a**

SUPPORTING MEMORANDUM

FROM : Scott M. Rehmer DATE : 03/13/2015

TO : PERMIT PREP CHECKLIST

RE : **MALLINCKRODT INC.** PERMIT : **1011728100-2**

EFFECTIVE DATE : **06/01/2015**

The following are FIVE (5) modified special conditions added to the above permit.

D.12.a (special, D.3) Special Sampling & Analytical Procedure - 008, 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.12.b (special, D.4) Special Sampling & Analytical Procedure - 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.12.c (special, D.5) Special Sampling & Analytical Procedure - 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

D.12.d (special, D.6) Special Sampling & Analytical Procedure – 080, 936

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points 080 and 936; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

E.21 (special, E.7) Special Cert & Reporting Requirement - 930, 933, 936

For sampling points 930, 933, and 936 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, and 936 are adhered to.

Mallinckrodt, 3600 N 2nd St, 63147; Facility ID = 1011728100-2; SP-905; 03-13-2015

414.111 Org. Chem, Plastics, Synthetic Fibers Effluent characteristics	PSES and PSNS			SP-905				
	DM (ug/L)	MA (ug/L)	SP-905	DM (g/Day)	MA (g/Day)		DM (g/Day)	MA (g/Day)
1,1,1-Trichloroethane	59	22	**60,676**	14	5			
1,1,2-Trichloroethane	127	32	**GPD**	29	7	**GPD**		
1,1-Dichloroethane	59	22	volume	14	5			
1,1-Dichloroethylene	60	22	update	14	5			
1,2,4-Trichlorobenzene	794	196	received	182	45			
1,2-Dichlorobenzene	794	196	12/1/14	182	45			
1,2-Dichloroethane	574	180		132	41			
1,2-Dichloropropane	794	196		182	45			
1,2-trans-Dichloroethylene (trans...)	66	25		15	6			
1,3-Dichlorobenzene	380	142		87	33			
1,3-Dichloropropylene (cis&trans...)	794	196		182	45			
1,4-Dichlorobenzene	380	142		87	33			
2-Nitrophenol	231	65		53	15			
4,6-Dinitro-(o-cresol) (...2-MePh)	277	78		64	18			
4-Nitrophenol	576	162		132	37			
Acenaphthene	47	19		11	4			
Anthracene	47	19		11	4			
Benzene	134	57		31	13			
Bis(2-ethylhexyl) phthalate	258	95		59	22			
Carbon Tetrachloride	380	142		87	33			
Chlorobenzene	380	142		87	33			
Chloroethane	295	110		68	25			
Chloroform	325	111		75	25			
Diethyl phthalate	113	46		26	11			
Dimethyl phthalate	47	19		11	4			
Di-n-butyl phthalate	43	20		10	5			
Ethylbenzene	380	142		87	33			
Fluoranthene	54	22		12	5			
Fluorene	47	19		11	4			
Hexachlorobenzene	794	196		182	45			
Hexachlorobutadiene	380	142		87	33			
Hexachloroethane	794	196		182	45			
Methyl Chloride (ChloroMethane)	295	110		68	25			
Methylene Chloride	170	36		39	8			
Naphthalene	47	19		11	4			
Nitrobenzene	6,402	2,237		1470	514			
Phenanthrene	47	19		11	4			
Pyrene	48	20		11	5			
Tetrachloroethylene	164	52		38	12			
Toluene	74	28		17	6			
Total Cyanide	1,200	420		276	96			
Total Lead	690	320		158	73			
Total Zinc	2,610	1,050		599	241			
Trichloroethylene	69	26		16	6			
Vinyl Chloride	172	97		40	22			

DM = Daily Max MA = Monthly Average

PERMIT FILE COPY

Mallinckrodt
Pharmaceuticals

SR

March 17th, 2015

Mr. Scott M. Rehmer
Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147

VIA EMAIL

RE: **Industrial User Questionnaire-Permit Application Follow-Up Information-** PERMIT NO. 1011728100-2

Dear Mr. Rehmer,

This letter is in response to your email dated March 3, 2015 discussing our absence certifications. I would like to submit the following approval for Mallinckrodt LLC, located at 3600 North 2nd Street, St. Louis MO 63147, that we are in agreement with the following certification statements to be included as part of our permit renewal application.

Absence Certification of Regulated Pollutants & Once per Year Sampling – Sample Points 915 and 936

Based on the determination referenced above and on permittee's verification that Diethylamine and Triethylamine, regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points **915** and **936**, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

Absence Certification of Regulated Pollutants & Once per Year Sampling – Sample Point 930

Based on the determination referenced above and on permittee's verification that all pollutants (acetone, ethyl acetate, isopropyl acetate, methylene chloride, and n-amyl acetate), regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling point 930, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

RECEIVED

MAR 17 2015

DIVISION OF
ENVIRONMENTAL COMPLIANCE

MALLINCKRODT
3600 NORTH SECOND STREET
ST. LOUIS, MO 63147

TELEPHONE: 314-654-2000
FAX: 314-654-1251

Mallinckrodt
Pharmaceuticals

439 Surrogate Recommendation & Certification

Pursuant to the provisions of 40 CFR 439(1)(l) and (4) the District has historically accepted the permittee's recommendation to allow monitoring for surrogate pollutants at sampling points 920 and 937 in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, PSES. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, each quarterly self-monitoring report shall include a statement certifying that the recommendation on file, referenced by date, remains valid.

If you have any questions or require additional information, please contact me at 314-654-0384 or via email at jada.wilhelm@mallinckrodt.com.

Sincerely,

Jada L. Wilhelm

Jada Wilhelm
Environmental Specialist

RECEIVED
MAR 17 2015
DIVISION OF
ENVIRONMENTAL COMPLIANCE

MALLINCKRODT
3600 NORTH SECOND STREET
ST. LOUIS, MO 63147

TELEPHONE: 314-654-2000
FAX: 314-654-1251

Scott Rehmer SR

PERMIT FILE (COPY)

From: Shank, Brett <Brett.Shank@mallinckrodt.com>
Sent: Tuesday, March 24, 2015 2:25 PM
To: Scott Rehmer; Wilhelm, Jada
Subject: RE: MSD to Mallinckrodt permit application

1011-7281-00

Scott: We will stay with mass limits at this time.

From: Scott Rehmer [mailto:srehmer@stlmsd.com]
Sent: Monday, March 23, 2015 9:02 AM
To: Wilhelm, Jada
Cc: Shank, Brett
Subject: RE: MSD to Mallinckrodt permit application

One more question.
At SP905, for categorical 414, you have the option to stay with mass limits (in grams/day), or switch to concentration limits (in mg/L). See attached spreadsheet for the comparison. Please let us know no later than **Thursday, 3/26/2015**. Let me know if you have any questions.

Thanks, **Scott M. Rehmer, MSD**

From: Scott Rehmer
Sent: Wednesday, March 18, 2015 4:44 AM
To: 'Wilhelm, Jada'
Cc: Brett.Shank@mallinckrodt.com
Subject: RE: MSD to Mallinckrodt permit application

Hi Jada and Brett.
We are in agreement with the cert statements addressed in your letter dated 3/17/15.
No other signed copy is required by us.
A draft permit will be sent to you next week, most likely.
Have a good one!
Scott Rehmer, MSD

From: Wilhelm, Jada [mailto:Jada.Wilhelm@mallinckrodt.com]
Sent: Tuesday, March 17, 2015 4:12 PM
To: Scott Rehmer
Cc: Shank, Brett
Subject: RE: MSD to Mallinckrodt permit application

Scott,

Please see attached letter in response to your comments about our absence certification statement associated with our wastewater permit renewal application. We can follow-up with a signed copy of these certification statements from our Senior Site Director if that is also needed.

Please let me know if you need any additional information.

Thank you,

Jada Wilhelm I Environmental Specialist
Mallinckrodt Pharmaceuticals
3600 North 2nd St. I St. Louis, MO 63147 I USA
T: 314.654.0384 I F: 314.654.1251

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

June 3, 2013

Amber Crouch, Senior HS&E Engineer
MALLINCKRODT LLC
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 - 1.1
For premise at: 3600 N. 2nd Street, 63147

Dear Ms. Crouch:

Your Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit issued on June 1, 2013, for the above premise, is hereby revised as per the attached revised permit.

The following revisions were made to the permit:

- Self-monitoring for cyanide was added to sample points 010, 920, and 937, due to the plans to begin the buphrenophine process, which contains cyanogen bromide
- The "no cyanide" certification at sample points 920 and 937 were removed from special condition C.8, and from special certification F

We have reissued the entire permit for your convenience. Please replace your prior permit with this letter and the revised permit. The terms of the revised permit supersede your prior permit.

You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals.

This revision does not affect any monitoring or analysis of your discharge that may be necessary to comply with other requirements of your permit and in no way relieves you of your obligations to achieve the discharge limitations as provided in the permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Industrial Wastewater Discharge Permit, Self-monitoring Report Form

cc: Doug Mendoza
Jason Gill

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 – 1.1

EFFECTIVE DATE: July 01, 2013
EXPIRATION DATE: May 31, 2015

ISSUED TO: MALLINCKRODT LLC
3600 N 2nd Street
St. Louis, MO 63147

SIC NUMBER(S): 2816, 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 20
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,001

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water + Condensate (from steam generator, Building 250)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of Building #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 29,142

WASTEWATER SOURCE AND CATEGORY: Sanitary + Laboratory Waste (439 Sub E NA (No Standards) & non-439 R&D) + Non-Categorical Process Waste (Machine shop, painting, parts washing) + Flow From Upstream Sample Point (From SP 009) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]		***	Daily Avg
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.52	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 32,000

WASTEWATER SOURCE AND CATEGORY: Non-Contact Cooling Water + Laboratory Waste (R&D waste (including 439 from Building 96))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of building T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Pump station bypass to Salisbury trunk)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 11,000

WASTEWATER SOURCE AND CATEGORY: Flow From Offsite (Offsite W of Broadway) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 1,144,137

WASTEWATER SOURCE AND CATEGORY: Cooling Tower Blowdown + Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 936, 937 and 938) + Non-Categorical Process Waste + Laboratory Waste + Sanitary + Boiler Blowdown + Plant & Equipment Washdown + Kitchen Waste + Non-Contact Cooling Water + Regeneration/Reject Water + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Cyanide, Amenable [mg/L]	1.2	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass(Overflow from Plant 5)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 3,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no)) + Laboratory Waste + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 080
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo

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** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents Waste Water contributions between upstream Sample Point 009 & downstream Sample Point 003)

AVERAGE WASTEWATER FLOW (GPD): 18,142

WASTEWATER SOURCE AND CATEGORY: Storm Water + Laboratory Waste + Non-Categorical Process Waste + Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 100,000

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
(cis & trans) 1,3-Dichloropropene [g/Day]	301	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	74	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	48	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	12	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	8	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	22	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	8	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	23	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	217	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	68	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	74	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	25	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	105	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	30	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	218	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	61	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	18	Daily Max	Once/3 mo
Acenaphthene [g/Day]	7	Monthly Avg	Once/3 mo
Anthracene [g/Day]	18	Daily Max	Once/3 mo
Anthracene [g/Day]	7	Monthly Avg	Once/3 mo
Benzene [g/Day]	51	Daily Max	Once/3 mo
Benzene [g/Day]	22	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 905
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Bis (2-EthylHexyl) Phthalate [g/Day]	98	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	36	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	144	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	54	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	144	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	112	Daily Max	Once/3 mo
Chloroethane [g/Day]	42	Monthly Avg	Once/3 mo
Chloroform [g/Day]	123	Daily Max	Once/3 mo
Chloroform [g/Day]	42	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	112	Daily Max	Once/3 mo
Chloromethane [g/Day]	42	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	43	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	17	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	18	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	7	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	16	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	144	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	54	Monthly Avg	Once/3 mo
Fluoranthene [g/Day]	20	Daily Max	Once/3 mo
Fluoranthene [g/Day]	8	Monthly Avg	Once/3 mo
Fluorene [g/Day]	18	Daily Max	Once/3 mo
Fluorene [g/Day]	7	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	301	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	144	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	54	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	301	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	74	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	112	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	42	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	18	Daily Max	Once/3 mo
Naphthalene [g/Day]	7	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	2423	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	847	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	18	Daily Max	Once/3 mo
Phenanthrene [g/Day]	7	Monthly Avg	Once/3 mo
Pyrene [g/Day]	18	Daily Max	Once/3 mo
Pyrene [g/Day]	8	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	68	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	20	Monthly Avg	Once/3 mo
Toluene [g/Day]	28	Daily Max	Once/3 mo
Toluene [g/Day]	11	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	25	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	9	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 905
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Trichloroethene [g/Day]	26	Daily Max	Once/3 mo
Trichloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	65	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	37	Monthly Avg	Once/3 mo

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** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 150,000

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from buildings 504 and 505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Max	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	5459	Monthly Avg	Once/mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of building 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 915
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	50	Daily Max	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of building 512

AVERAGE WASTEWATER FLOW (GPD): 13,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in building 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of building 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 1,800

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of building 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator building 8' from S wall in SE corner of building 260

AVERAGE WASTEWATER FLOW (GPD): 16,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 936
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/year
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of building 501

AVERAGE WASTEWATER FLOW (GPD): 23,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Cyanide (Total) [mg/L]	33.5	Daily Max	Once/3 mo
Cyanide (Total) [mg/L]	9.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 71

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by October 28, 2013. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to

continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. PROHIBITED DISCHARGES

A.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point **905**. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point **905**.

B. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

B.1. No Monitoring When Influenced by Storm Runoff

Sampling points **003, 008, 009, 010, 011, and 080** may, at times, convey storm water in addition to wastewater regulated by this permit. The self-monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

B.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point **009** and "downstream" sampling point **003**. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point **099**. Permittee shall perform monitoring at both **009** and **003** within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at **099**, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; DC = downstream concentration; UF = upstream flow rate; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

B.3. Special Sampling and Analytical Procedures – Sample Points 008 and 011

The permittee shall monitor sampling points **008** and **011** for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

B.4. Special Sampling and Analytical Procedures – Sample Point 912

Discharges at sampling point **912** shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

B.5. Special Sampling and Analytical Procedures – Sample Point 938

Since the operation at Sample Point **938** is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

B.6. Special Sampling and Analytical Procedures – Net/Gross Allowance Monitoring

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points **080** and **936**; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

C. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

C.1. Sampling Not Required at Non-Toxic/Low-Flow Point

The permittee is not required to sample discharges at sampling points **001** and **002**, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

C.2. Special Certification and Reporting Requirements – Sample Points 930, 933 and 936

For sampling points **930**, **933**, and **936** permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points **930**, **933**, and **936** are adhered to.

C.3. Determination of Absence of Regulated Pollutants

The permittee has determined that Diethylamine and Triethylamine, regulated under 40 CFR 439, Subpart C, are neither used nor generated in pharmaceutical manufacturing operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records. The permittee must maintain the documentation for this determination in the facility permit records, for a period of at least three (3) years following expiration of this permit. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

C.4. Absence Certification of Regulated Pollutants & Once per Year Sampling – Sample Points 915 and 936

Based on the determination referenced above and on permittee's verification that Diethylamine and Triethylamine, regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points **915** and **936**, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

C.5. 439 Surrogate Recommendation & Certification – Sample Points 920 and 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points **920** and **937**. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

C.6. Sampling Not Required at Connections with NO Sample Points and with Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

C.7. No Sampling at Connections Between Upstream and Downstream Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

C.8. Certification of No Cyanide Under 40 CFR 439

The permittee has reported that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points **080**, **915**, and **936**. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

C.9. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

C.10. Reporting of Results Under Mass Discharge Limits – Sample Point 905

The limitations at sampling point **905** are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

C.11. Reporting Continuous pH Monitoring Data – Sample Point 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point **010**, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

D. SPECIAL BILLING REPORTING REQUIREMENTS

D.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Sewer Service Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on **ninety-six (96) percent** of the used water (on an annual basis) being discharged to the District. The permittee shall notify the District's Department of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

D.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Sewer Service Charge Ordinances, the permittee is currently subject to surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and/or Total Suspended Solids (TSS). As of July 21, 2011, the permittee's surcharge billing values are: 415 mg/l for BOD, 825 mg/l for COD, and 68 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

E. DERIVATION OF LIMITATIONS

E.1. Ammonia Limits Under 40 CFR 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

THIS IS THE LAST PAGE OF THIS PERMIT.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT LLC**

Permit No: **1011728100-1.1** Effective Date: July 01, 2013 Expiration Date: May 31, 2015

Premise Address: 3600 North Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, and 936,** subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points **915 and 936**, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

MSD

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

DOCUMENTATION FORM for PERMIT REVISION

Company Name: **MALLINCKRODT LLC**

Premise Address: **3600 N 2ND Street**

Former Permit No: **1011728100-1** Original Effective Date: **6/1/2013**

Revised Permit No: **1011728100-1.1** Revision Effective Date: **7/1/2013**

WHY – Cite regulation, policy, etc. and identify any other documents which support the revision:

E-mail from A.Crouch, 5/23/2013, facility plans to begin buphrenophine process (containing cyanogen bromide) ~ Sept. 2013; MSD will add self-monitoring for CN(t) to SP920 and 937; CN(a) to SP010.

WHAT – Briefly explain what is to be revised and then list the pages & how affected:

Added CN monitoring requirement to SP 920, 937, and 010.

Pg. # 1 **Scott Rehmer, Assistant Engineer**

Pg. # 8 **SP010, added CN(a) to quarterly self-monitoring**

Pg. # 19 **SP920, added CN(t) to quarterly self-monitoring**

Pg. # 25 **SP937, added CN(t) to quarterly self-monitoring**

Pg. # 35 **C.8 removed 920 and 937 from "no cyanide" certification**

Pg. # 38 **Spec Cert F removed 920 and 937 from "no cyanide" certification**

SMR Start Dates for any new requirements:

Once/3 mo: 7/1/13 or ☐ no new requirements
Once/6 mo: _____ or ☒ no new requirements
Once/year: _____ or ☒ no new requirements

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Pollutant & Limitations Documentation Sheets (for SP's 010, 920, 937)	☒	☐	☐
Production-based Standards Calc. Sheets (for Sampling Points _____)	☐	☐	☒
Mass-based Standards Calc. Sheets (for Sampling Points _____)	☐	☐	☒
Most Strict Limits Sheets (for Sampling Points _____)	☐	☐	☒
Combined Wastestream Formula Sheets (for Sampling Points _____)	☐	☐	☒
Text of any Customized Special Conditions: If Yes, for which SCs: _____	☐	☐	☒

Other: _____

Prepared by: S. Rehmer SR	Date: 5/28/2013
Reviewed by: J. MENDOZA	Date: 5-31-13

PERMIT NO: 1011728100-1.1

CHANGES TO

Special Certifications & General Reports for Special Conditions not tied to specific sample points

ADDITIONS:	Special Conditions:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	SMR Cert Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____
	Gen Rpt Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]

Are the ADDITIONAL SMR certs associated with first permit sample point (_____)? YES ☐ NO ☐

DELETIONS:	Special Conditions:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____

Were the DELETED SMR certs removed from the first permit sample point (_____)? YES ☐ NO ☐

Check here if there are no changes to non-SP-specific Special Certifications or General Reports: ☒

MSD 015735

PERMIT NO: 1011728100-1.1

SAMPLING POINT REFERENCE NUMBER: 010 **TYPE:** Ord ☒ Cat ☐ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒

Wastewater Components: Cat from 905,912,915,920,927,930,933,936,937,938; CT blowdn, boiler blowdn, kitchen, Lab, NCCW, Non-cat process, P&E wash, Reject water, Sanitary, Storm

Flow Rate: 1,118,137 Units: GPD Basis for Flow Rate: IUQ

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
Cyanide, amenable	In process	Ord. 12559	once 3 mo	In process	☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015736

PERMIT NO: 1011728100-1.1

SAMPLING POINT REFERENCE NUMBER: 920 **TYPE:** Ord ☐ Cat ☒ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 13,000 Units: GPD Basis for Flow Rate: IUQ

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
Cyanide (total)	In process	439, Sub C, PSES	once 3 mo	In process	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
	* removed SP920 from the SC		[none]		☐
	E.15 (or C.8 in permit), "no CN"		[none]		☐

Special Condition:	# E.15 *	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# F *	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015737

PERMIT NO: 1011728100-1.1

SAMPLING POINT REFERENCE NUMBER: 937 **TYPE:** Ord ☐ Cat ☒ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒

Wastewater Components: Cat (439 Sub C, PSES)

Flow Rate: 23,000 Units: GPD Basis for Flow Rate: IUQ

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
Cyanide (total)	In process	439, Sub C, PSES	once 3 mo	In process	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
	* removed SP937 from the SC		[none]		☐
	E.15 (or C.8 in permit), "no CN"		[none]		☐

Special Condition:	# E.15	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# F	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015738

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

May 24, 2013

Amber Crouch
Senior HS&E Engineer
MALLINCKRODT LLC
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 1011728100 - 1
For premise at: 3600 N. 2nd Street, St. Louis, MO 63147

Dear Amber Crouch:

Your Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit issued on May 01, 2011, for the above premise, is hereby revised as per the attached revised permit.

The following revisions were made to the permit:

- Sample Point 935 has been identified as inactive and is no longer used.
- Sample Point 935 has been removed from the Monitoring Requirements and Special Conditions of this permit.
- The Surcharge Values have been updated.

We have reissued the entire permit for your convenience. Please replace your prior permit with this letter and the revised permit. The terms of the revised permit supersede your prior permit.

You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals.

This revision does not affect any monitoring or analysis of your discharge that may be necessary to comply with other requirements of your permit and in no way relieves you of your obligations to achieve the discharge limitations as provided in the permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8721, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Chris Bulmahn

Chris Bulmahn
Associate Engineer

Enclosures: Industrial Wastewater Discharge Permit, Self-monitoring Report Form

cc: Doug Mendoza
Jason Gill

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 1011728100 - 1

EFFECTIVE DATE: June 01, 2013
EXPIRATION DATE: May 31, 2015

ISSUED TO: MALLINCKRODT LLC
3600 N 2nd St
St. Louis, MO 63147

SIC NUMBER(S): 2816, 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 20
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Chris Bulmahn
Associate Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,001

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water + Condensate (from steam generator, Building 250)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of Building #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

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** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 29,142

WASTEWATER SOURCE AND CATEGORY: Sanitary + Laboratory Waste (439 Sub E NA (No Standards) & non-439 R&D) + Non-Categorical Process Waste (Machine shop, painting, parts washing) + Flow From Upstream Sample Point (From SP 009) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]		***	Daily Avg
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.52	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 32,000

WASTEWATER SOURCE AND CATEGORY: Non-Contact Cooling Water + Laboratory Waste (R&D waste (including 439 from Building 96))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Overflow chamber on N side of pump station on W side of building T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Pump station bypass to Salisbury trunk)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 11,000

WASTEWATER SOURCE AND CATEGORY: Flow From Offsite (Offsite W of Broadway) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 1,118,137

WASTEWATER SOURCE AND CATEGORY: Cooling Tower Blowdown + Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 936, 937 and 938) + Non-Categorical Process Waste + Laboratory Waste + Sanitary + Boiler Blowdown + Plant & Equipment Washdown + Kitchen Waste + Non-Contact Cooling Water + Regeneration/Reject Water + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

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** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass(Overflow from Plant 5)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 3,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no)) + Laboratory Waste + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 080
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents Waste Water contributions between upstream Sample Point 009 & downstream Sample Point 003)

AVERAGE WASTEWATER FLOW (GPD): 18,142

WASTEWATER SOURCE AND CATEGORY: Storm Water + Laboratory Waste + Non-Categorical Process Waste + Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 100,000

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
(cis & trans) 1,3-Dichloropropene [g/Day]	301	Daily Max	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	74	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	48	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	12	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	8	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	22	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	8	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	23	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	217	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	68	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	74	Monthly Avg	Once/3 mo
1,3-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	25	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	105	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	30	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	218	Daily Max	Once/3 mo
4-Nitrophenol [g/Day]	61	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	18	Daily Max	Once/3 mo
Acenaphthene [g/Day]	7	Monthly Avg	Once/3 mo
Anthracene [g/Day]	18	Daily Max	Once/3 mo
Anthracene [g/Day]	7	Monthly Avg	Once/3 mo
Benzene [g/Day]	51	Daily Max	Once/3 mo
Benzene [g/Day]	22	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 905
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Bis (2-EthylHexyl) Phthalate [g/Day]	98	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	36	Monthly Avg	Once/3 mo
Carbon Tetrachloride [g/Day]	144	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	54	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	144	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	112	Daily Max	Once/3 mo
Chloroethane [g/Day]	42	Monthly Avg	Once/3 mo
Chloroform [g/Day]	123	Daily Max	Once/3 mo
Chloroform [g/Day]	42	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	112	Daily Max	Once/3 mo
Chloromethane [g/Day]	42	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	43	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	17	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	18	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	7	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	16	Daily Max	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Monthly Avg	Once/3 mo
Ethylbenzene [g/Day]	144	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	54	Monthly Avg	Once/3 mo
Fluoranthene [g/Day]	20	Daily Max	Once/3 mo
Fluoranthene [g/Day]	8	Monthly Avg	Once/3 mo
Fluorene [g/Day]	18	Daily Max	Once/3 mo
Fluorene [g/Day]	7	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	301	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
Hexachlorobutadiene [g/Day]	144	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	54	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	301	Daily Max	Once/3 mo
Hexachloroethane [g/Day]	74	Monthly Avg	Once/3 mo
Methylene Chloride [g/Day]	112	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	42	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	18	Daily Max	Once/3 mo
Naphthalene [g/Day]	7	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	2423	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	847	Monthly Avg	Once/3 mo
Phenanthrene [g/Day]	18	Daily Max	Once/3 mo
Phenanthrene [g/Day]	7	Monthly Avg	Once/3 mo
Pyrene [g/Day]	18	Daily Max	Once/3 mo
Pyrene [g/Day]	8	Monthly Avg	Once/3 mo
Tetrachloroethene [g/Day]	68	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	20	Monthly Avg	Once/3 mo
Toluene [g/Day]	28	Daily Max	Once/3 mo
Toluene [g/Day]	11	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	25	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	9	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 905
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Trichloroethene [g/Day]	26	Daily Max	Once/3 mo
Trichloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Vinyl Chloride [g/Day]	65	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	37	Monthly Avg	Once/3 mo

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 150,000

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process Waste (ASI process waste from buildings 504 and 505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
N,N-Dimethyl Acetamide [LB/DY]	7091	Daily Max	Once/mo
N,N-Dimethyl Acetamide [LB/DY]	5459	Monthly Avg	Once/mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of building 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 915
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	50	Daily Max	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of building 512

AVERAGE WASTEWATER FLOW (GPD): 13,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no,NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in building 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of building 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 1,800

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

CR

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL FACILITY INSPECTION REPORT

Company: SPECGX LLC Account #: 1011728100
Premise Address: 3600 N 2nd Street Zip Code: 63147
MSD Classes: SIU ☒ Non-Significant CIU ☐ CIU ☒ Surcharge ☒ Non-Toxic Process Water/Wastes ☐
Toxics-Bearing Waste ☒ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐
Company Representative: Jonathan Eckles
Title: Environmental Manager Phone#: 314-654-0138
Inspector: Mike Kynion
Others Present: Jeff Blaies - Principal Environmental Engineer
Inspection Date: **5/20/19** Time: From 08:15 AM To 12:45 PM (Last Insp. 5/23/18)

NOTE: ALL ITEMS ARE TO BE COMPLETED BASED ON EVENTS SINCE LAST INSPECTION. ANSWERS ARE BASED ON INFORMATION OBTAINED OR PROVIDED BY COMPANY DURING INSPECTION, AS WELL AS INFORMATION IN FILE.

***** DATABASE ALSO UPDATED WITH APPROPRIATE CHANGES - see attached database reports *****

1. A. ARE THERE ADDITIONAL ACCOUNT NUMBERS? Yes ☐ No ☒
   List them, note any changes: _____
   B. Were any changes (including to the primary or changes only to suffixes) for acct no's with RFs? NA ☐ Yes ☐ No ☒
   C. If yes to B, was Cost Recovery Unit informed of the change(s)? NA ☒ Yes ☐ No ☐
   D. Did all acct no's have water usage in PT database? Yes ☒ No ☐
   E. If no to D, explain: _____

2. DOES COMPANY HAVE WATER/WASTEWATER SOURCES OTHER THAN FROM INCOMING WATER METERS? Yes ☐ No ☒
   If yes: A. Are volumes reported to MSD? Yes ☐ No ☐
   If no: Write company and require submittal of volumes, method of measurement & calibration, etc.
   If yes: B. Are volumes read with meters ☐ or other methods ☐?
   If other methods: C. Describe: _____
   [See "Special Handling" question for review of company's records]

3. PROCESSES & CLEANUP/WASHDOWN:

	Cont/ Batch?	Water/Liquids Used?	DISCHARGE Frequency (or how else disposed?)	Sample pt.
Pharmaceutical manufacturing via extraction with associated washdown (439 Sub B) - SP927, SP930 and SP933 are currently inactive, but have potential to come back online	Batch	Yes	Daily	927, 930, 933
Pharmaceutical manufacturing via mixing/compounding with associated washdown (439 Sub D)	Batch	Yes	Daily	938
Pharmaceutical manufacturing via chemical synthesis with associated washdown (439 Sub C) - SP080 and SP915 are currently inactive, but have potential to come back online	Batch	Yes	Daily	080, 915, 920, 936, 937, 939
Pharmaceutical manufacturing - single dose lollipop (fentanyl) with associated washdown	Batch	Yes	Daily	938
Imaging compound manfacturing with associated washdown (non-rad contrast media) - not in production at this time (SP912 currently inactive)	Batch	Yes	Daily	912
Stearate manufacturing with associated washdown (414 Sub G&H)	Batch	Yes	Daily	905
Inorganic (salts) compound manufacturing w/ associated washdown	Batch	Yes	Daily	010
QC and R&D Lab wastewater – SP080 is currently Inactive	Batch	Yes	Daily	003, 005, 010, 099
Kitchen waste	Batch	Yes	Daily	010
Ground water from FUSRAP radioactive soil excavation	Batch	Yes	Daily	809

4. DOES COMPANY HAVE ANY STORM WATER DISCHARGES TO THE SEPARATE SANITARY SEWER? Yes☐ No☒
(Including: slotted MH/vent covers, uncovered or unbermed outside wash pads, etc.)

If yes: A. Describe: _____
(Write company and have discharge properly mitigated and/or rerouted to storm.)

5. PRETREATMENT (other than grease traps) - describe:

	Sample pt.
pH adjust (SP9012, SP930, SP933 are currently inactive)	005, 010, 905, 912, 930, 933, 939, 080
Steam Stripper (PEG system)	920, 937, 010
Filter Press	905
Microscreening and O/W separator	010
Filtration (SP927 currently inactive)	809, 927
Chemical precipitation	809, 905
Carbon absorption and settling	809
Settling pit (maintenance garage)	003

6. DOES COMPANY HAVE ANY GREASE TRAPS? Yes☐ No☒

If yes:
A. List sample points: _____
B. What is the frequency for cleaning & maintenance? _____
C. Were cleaning & maintenance logs reviewed for to verify frequency? (must be done) Yes☐ No☐
D. If No to C: Explain: _____
E. Has company been in SNC in the past two years for food-based oil & grease violations? Yes☐ No☐
F. If Yes to E: Is frequency for cleaning & maintenance at least once/quarter? NA☐ Yes☐ No☐
G If No to F, require company to begin cleaning at least once/quarter. Was this done? NA☐ Yes☐ No☐
H. Are any additives used in traps? Yes☐ No☐
I. If yes to H, was company warned MSD will bill them for blockages they cause? NA☐ Yes☐ No☐
J. Was company informed that MSD performs separate grease trap inspections? Yes☐ No☐

7. HAS COMPANY CONSTRUCTED NEW BLDGS/ADDITIONS WITH SEWERS SINCE LAST INSPECTION? Yes☐ No☒

If yes: A. Ask company: Did they notify MSD's Plan Review group? Unknown☐ Yes☐ No☐

B. If no or unknown, has inspector notified Plan Review group? Yes☐ No☐

C. Comments: _____

8. HAS COMPANY BEGUN DISCHARGING ANY NEW POLLUTANTS SINCE THE LAST INSPECTION? Yes☐ No☒

If yes: A. List pollutants & process: _____

B. Will MSD STP exceed existing NPDES discharge limit(s)? Yes☐ No☐

C. Will MSD STP's discharge exceed 0.1 mg/l for any new pollutant? Yes☐ No☐

(MSD must notify MDNR if B or C is yes and discharge will continue [40CFR122.42(b)].)

D. Comments: _____

9. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS THAT ARE "NOT APPLICABLE"? Yes☒ No☐

(including those that are 'No PSES' and 'General Stds Only')

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 439 Sub E - N/A

B. Explain why it is N/A: No limits

10. ARE THERE ANY FEDERALLY REGULATED (40 CFR 405-471) OPERATIONS SUBJECT TO DISCHARGE LIMITS? Yes☒ No☐

If yes: A. List regulation & describe operations (including any discharge):

40 CFR 439 Sub B, C, D PSES - synthesis, extraction, mix/compound. 40 CFR 414 Sub G&H PSES - stearates discharge to sewer.

B. Is maximum daily categorical discharge ≤ 100 GPD? (includes batch discharges) Yes☐ No☒

If yes to B: C. Batch ☐ or Continuous ☐? Volume verified how? _____

D. Does company ever discharge untreated, concentrated categorical wastewater? Yes☐ No☐

E. Was company in SNC during any part of the previous **24** months? Yes☐ No☐

F. Date of last NSCIU Certification Statement: _____ or not currently NSCIU ☐

(If no to B, yes to D or E, or Cert. Statement not submitted as required, company is not eligible to be an NSCIU)

11. HAS COMPANY CERTIFIED TO THE ABSENCE OF SPECIFIC CATEGORICAL POLLUTANTS? Yes☒ No☐

(New certification also is required for each permit renewal)

If yes: A. Certification date: 3/17/15

B. Pollutants accepted by MSD as absent: Diethylamine, Triethylamine, Acetone, Ethyl Acetate, Isopropyl Alcohol, n-Amyl Acetate, Methylene Chloride

C Were any requested "absent" pollutants rejected by MSD? Yes☐ No☒

If yes to C: D. List them and explain why: _____

E. Were all the accepted pollutants non-detect in all monitoring since certification was approved? Yes☒ No☐

(If compared to intake water levels, explain details below)

If no to E: F. Explain: _____

G. Does Wastewater Discharge Permit need to be updated to remove detected pollutants? Yes☐ No☐

H. Comments: _____

12. DOES CATEGORICAL WASTEWATER COMBINE WITH NON-CATEGORICAL WW PRIOR TO SAMPLING? Yes☐ No☒

If yes: A. At which points? _____

B. Current applied factor: _____ Is it correct? Yes☐ No☐

C. If no, list correct factor/explain? _____

13. IS ANY WASTEWATER SUBJECT TO PRODUCTION ☐ OR MASS ☒ BASED STANDARDS? Yes☒ No☐

If yes: A. At which points? 905, 912

B. Since calculation of the current limits, has the long term avg production rate or discharge volume changed by 20% or more? Yes☐ No☒

C. If yes to B, explain: _____

14. ARE ANY RADIOACTIVE MATERIALS HANDLED (other than solely from sealed sources)? Yes☐ No☒

If yes: A. Describe operations & disposal: Note: there is an Army Corp of Engineers FUSRAP site which has rad material contaminated soil/groundwater. This is handled under special discharge approval through MSD and will be reported to MSD independently. SPECGX will continue to report NO DISCHARGE on their quarterly Rad Reports.

B. Does company have an NRC license? Yes☐ No☒

C. If No, explain why not: _____

D. If non-exempt & disposed to sewer, does company submit quarterly reports to MSD? NA☒ Yes☐ No☐

(If No to B, write company & require quarterly reports of discharge to sewer – or have permit revised as needed)

E. Amount discharged in most recent four complete calendar quarters: _____

F. Is company in compliance with requirements of sewer use ordinance prohibition? Yes☒ No☐

G. If No, explain why not: _____

15. DOES COMPANY GENERATE WASTES/WASTEWATER BY GENETIC ENGINEERING RESEARCH? Yes☐ No☒

If yes: A. Does company render wastes/wastewater innocuous? Yes☐ No☐

B. If yes, describe how: _____

C. Does company have MSD authorization for disposal to sewer? NA☐ Yes☐ No☐

D. Most recent authorization date: _____

16. DOES PROCESS or P&E WASHDOWN WATER USE APPEAR EXCESSIVE? Yes☐ No☒

(IS COMPANY USING DILUTION TO MEET DISCHARGE LIMITATIONS?)

A. Explain how use was verified & any needed changes:

No excessive water usage was observed during the facility inspection. Large scale pharmaceutical operation requires large volume usage for production and washdown. Based on information submitted by SPECGX on their last permit renewal and usage obtained from ECIS, SPECGX estimated usage is higher than ECIS records. Over the past few years, usage at the facility has gradually decreased. The decrease in usage in comparison to the last permit renewal info is attributed to less employees, less active processes, facility improvements (bldgs demoed, repaired leaks, etc.) and water conservation efforts.

17. BASED ON OBSERVATIONS DURING INSPECTION, DOES COMPANY APPEAR TO HAVE SOME WATER THAT IS NOT DISCHARGED TO SEWER? Yes☒ No☐

If yes: A. Describe: Retained in product, evaporation and hauled

B. What is the approximate daily volume that is not discharged? 10000

C. Was "Return Factor Program" brochure given to company? Yes☒ No☐

(regardless of whether some water is not discharged to sewer)

18. INCOMING & OUTGOING WATER/WASTEWATER VOLUME

A. What is the TOTAL avg daily INCOMING water volume (from water meters + unmetered sources)? 235728

B. What is the TOTAL avg daily volume DISCHARGED to sewer (from all sample point flow streams)? 646168

C. Difference: 410440

D. Does difference agree with amt not discharged from above question (within 20% of incoming amt)? Yes☐ No☒

If no to D: E. Explain: As discussed in Q.16 above, SPECGX has less employees, inactive processes, facility improvements, etc. All of these factors have contributed to a decrease in usage. The facility is still undergoing several renovations throughout the facility. SPECGX current MSD permit is set to expire in November of 2022. Majority of the bldg renovations and facility improvements are anticipated to near completion by early 2020. At that time SPECGX plans to resubmit an updated IUQ with adjusted discharges and active/inactive sample points. iPACS will be updated once the new IUQ is submitted.

19. HAS COMPANY BEEN GRANTED A VARIANCE FROM DISCHARGE LIMITATIONS CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and variance limit: _____

B. Latest approval date: _____

C. Is the approved variance more than 5 years old? Yes☐ No☐

(If yes to C, a new variance must be requested – write company)

20. HAVE ANY NUMERICAL LIMITATIONS BEEN APPLIED TO COMPANY, IN ADDITION TO THOSE ALREADY CONTAINED IN THE SEWER USE ORDINANCE? Yes☐ No☒

If yes: A. Pollutant(s) and discharge limit: _____

B. Date originally applied: _____, or as part of variance above? ☐

21. HAS COMPANY EXCEEDED ORDINANCE DISCHARGE LIMITS SINCE LAST INSPECTION OR WITHIN THE LAST 12 MONTHS (if last insp <12 months ago)? Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

22. HAS COMPANY EXCEEDED CATEGORICAL PRETREATMENT LIMITS SINCE THE LAST INSPECTION OR WITHIN LAST 12 MONTHS (if last insp <12 months ago)? NA☐ Yes☐ No☒

If yes: A.

Pollutant	When	Sample Points	Is problem resolved? Y/N	Describe
			N/A	
			N/A	
			N/A	
			N/A	
			N/A	

B. Comments: _____

23. HAVE THERE BEEN ANY PROBLEM DISCHARGES SINCE LAST INSPECTION? Yes☒ No☐

If yes: A. Upsets? ☐ Bypasses of pretreatment facilities? ☐

Spills? ☒ Slug discharges? ☐ Other? _____

B. Explain any marked: Spill occurred 05/12/2019. The discharge was approximately 245 gallons of Reduced Diamide solution, which entered a drain and discharged to Sample Point 010. The incident occurred during a transfer operation in Building 507. The release occurred due to a drain valve left open on the strainer; the threaded plug had not been properly installed. The valve was closed and the plug reinstalled. Signs will be used to notify operators to check valves prior to transfer, and only shift supervisors are allowed to unlock the valves

24. COULD SPILLS OR LEAKS OF ANY PROCESS TANKS, OR STORAGE TANKS, OR STORED WASTES, OR STORED CHEMICALS EASILY REACH SANITARY SEWERS OR STORM DRAINS? Yes☐ No☒

If yes: A. What needs to be done?

_____

If no: B. How are they controlled?

AST farms are appropriately contained. Spill kits/emergency response kits are located throughout the facility in applicable areas. Facility personnel are trained on spill protocols.

25. DOES COMPANY HAVE ANY WASTEWATER DISCHARGES TO STORM SEWERS OR TO GROUND? Yes☐ No☒

If yes: A. Describe: _____

B. Is discharge covered by an NPDES Permit? Yes☐ No☐

If no to B: Write company & require that discharge be ceased, rerouted to sanitary sewer or elsewhere internally, or company obtain an NPDES permit.

26. DOES COMPANY HAVE ANY NPDES PERMITS? Yes☐ No☒ Or NO EXPOSURE CERTIFICATIONS? Yes☐ No☒

If yes for NPDES:
A. Receiving stream:_____
B. Does it have a MDNR general permit for stormwater discharges from industrial activities? Yes☐ No☐
If yes to B: Permit #: MO-R_____
C. Does it have a MDNR general permit for wastewater discharges? Yes☐ No☐
If yes to C: Permit #: MO-G_____ Permitted activity:_____
D. Does it have a MDNR site specific permit for wastewater discharges? Yes☐ No☐
If yes to D: Permit #: MO0_____

Outfall	Description	Vol (GPD)	Components

E. Comments: _____

27. BASED ON OBSERVATIONS DURING INSPECTION, ARE THERE ANY AREAS WHERE COMPANY ACTIVITIES APPEAR TO IMPAIR STORMWATER RUNOFF? Yes☐ No☒

If yes:
A. Describe: _____
B. What needs to be done? _____
C. Was "Illicit Stormwater Discharges" brochure given to company? Yes☒ No☐
(regardless of whether there are any problem areas)

28. DOES COMPANY HAVE ANY WRITTEN SLUG DISCHARGE CONTROL (INCLUDES SPILLS) PLANS [40CFR403.8(f)(2)(vi)]? Yes☒ No☐

If yes:
A.

	Title (actual title, NOT "SPCCP")	Last Update
1.	SPCCP	1/1/17
2.	Spill & Slug Discharge Control Plan (currently under Administrative Review for update)	11/1/13

B. Were Plans reviewed for completeness, especially regarding batch discharges/slugs and Q.19/20/21? (must be done) Yes☐ No☒
C. Are updates needed to existing Plans? (If yes, write company & require) Yes☐ No☒
D. Are any Plans needed (either in addition to those listed in Part A, or if there currently are no written control plans)? (If yes, write company & require) Yes☐ No☒
E. Explain why/why not for C or D: Both plans cover the facility requirements: chemical volumes, spill procedures, containment, notifications, emergency contacts, etc.

29. DOES COMPANY HAVE ANY MAINTENANCE SHOP PARTS WASHERS? Yes☒ No☐

If yes:
A. Parts washer solvent name: Crystal Clean (4 currently) - company removed the 5th washer last year
B. Priority pollutants (or "none"): Typically BTEX
C. How is spent solvent disposed? Hauled
(These solvents are not included in database's priority pollutants list, nor monitored for unless conditions show potential discharges)

30. ARE ANY ORGANICS OR SOLVENTS USED (OTHER THAN IN PARTS WASHERS)? Yes☒ No☐

If yes:
A.

Solvent name/ components	Used for?	413/433/469 Process?	How disposed?	Priority Pollutant?
Multiple organics/solvents (See IDR and PP lists)	Process and cleaning	Yes☐ No☒	Sold in product, evaporates, hauled	Yes☒ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐
		Yes☐ No☐		Yes☐ No☐

31. DOES COMPANY HAVE A 413/433/469-REGULATORY "SOLVENT MANAGEMENT PLAN"? Yes☐ No☒
(Applies if co. has 413/433/469 processes, whether or not solvents used)

If yes:
- A. Is it part of a Spill/Slug Control Plan listed above? Yes[1.☐ 2.☐] No☐
- B. If no to A, date of last update for SMP: _____
- C. Is there a copy of the Spill/Slug Plan or SMP in the files? Yes☐ No☐
- D. Does SMP address all 413/433/469 solvents? (or verify "none" ☐) Yes☐ No☐
  (If no to C or D, write company and require submittal and/or update)

32. ARE EMERGENCY NOTIFICATION PROCEDURES POSTED THAT INCLUDE MSD CONTACTS? Yes☒ No☐
- A. Was company provided notification cards & told to post where emergency response personnel can locate them? Yes☒ No☐
  (Must post if company generates process wastewater or stores chemicals of concern)

33. IS COMPANY REQUIRED TO SELF-MONITOR ANY OF THEIR DISCHARGES? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. How frequently is sampling required? Quarterly
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

34. DOES COMPANY SELF-MONITOR ITS WASTEWATER DISCHARGE? Yes☒ No☐

If yes:
- A. Does sample collection time period match co's production shifts? Yes☒ No☐
- B. Are representative grab/comp samples collected? Yes☒ No☐
- C. Are EPA-approved 40 CFR 136 wastewater test methods used? Yes☒ No☐
- D. Does company measure pH and/or temperature itself? Yes☒ No☐
  - If yes: E. Have the company show equipment and procedure (meters, calibration stds, etc.). is measurement performed properly? Yes☒ No☐
- F. If no to A,B,C, or E, explain needed changes: Company is familiar with calibration and sampling protocols.

35. DOES COMPANY CONTINUOUSLY MONITOR AT SAMPLE POINT AND KEEP A PERMANENT RECORD FOR: pH ☒, TEMP ☐, LEL ☐? Yes☒ No☐

If yes:
- A. At which SPs? 010
- B. Are discharge limits in PT database "alert only"? (If not, change to that & make note: _____) Yes☒ No☐
- C. Does company submit quarterly summaries? Yes☒ No☐
- D. If no, explain: _____

36. DOES MSD SPLIT SAMPLES WITH THE COMPANY? Yes☐ No☒

If yes:
- A. Is company having the samples analyzed Yes☐ No☐
- B. How does company insure proper preservation, holding times & analytical methods? _____
- C. Has company submitted results of all split sample analyses since the last insp? Yes☐ No☐
- D. Have results been submitted within 28 days of the collection's calendar quarter? Yes☐ No☐
- E. If no to C, or D, explain: _____
- F. Does company still want to split samples? Yes☐ No☐
- G. Comments: _____

37. IS COMPANY REQUIRED TO REGULARLY SUBMIT ANY REPORTS OTHER THAN SELF-MONITORING REPORTS? Yes☒ No☐

If yes:
- A. Is requirement contained in permit ☒ or other document ☐.
- B. If other document, date & description: _____
- C. What is required to be reported? pH continous monitoring results SP010; Rad material discharge report from FUSRAP (Army Corp of Engineers)
- D. How frequently are reports required? Quarterly
- E. Have reports been on-time, complete & signed by proper person? Yes☒ No☐
- F. If no, explain: _____

38. IS COMPANY UNDER ANY ENVIRONMENTAL ENFORCEMENT ORDERS OR REQUIREMENTS TO SUBMIT COMPLIANCE SCHEDULE REPORTS? Yes☐ No☒

If yes:
- A. Type and date: _____
- B. Have the reports & actions been on-time & complete? Yes☐ No☐
- C. If no, explain: _____

39. ASK COMPANY: IS COMPANY IN COMPLIANCE W/APPLICABLE NESHAP REGULATIONS FOR WW DISCHARGES? Yes☒ No☐
[To see if 40CFR63 applies to MSD plant, per §§63.1580(b) & 63.1582(a). Some MDNR-issued Title V air permits for specific processes allow pre-approved WW discharge. City/County-issued air permits are not NESHAP permits.]

If no:
- A. Describe: _____
- B. Was MDNR Air Pollution Control informed? (must be done) Yes☐ No☐

40. DOES COMPANY RETAIN ALL WASTEWATER RECORDS FOR AT LEAST 5 YEARS? Yes☒ No☐

If no:
- A. How long does company retain records? _____
- B. Was company told to retain for at least 5 years, per ordinance? Yes☐ No☐
- C. Where are they kept? In the EHS files onsite.

41. IS COMPANY CLASSIFIED AS A SIGNIFICANT INDUSTRIAL USER (SIU)? Yes☒ No☐

If yes:
- A. Check & explain applicable criteria:
  - ☒ Process subject to categorical stds under 40 CFR 403.6. Which cat. stds? 439 Sub B,C,D and 414 Sub G&H
  - ☒ Process discharge => 25,000 GPD Total process volume: 354,798
  - ☐ Process discharge => 5% of TP ADW hydraulic capacity TP ADW hydraulic capacity: _____. Percent: _____
  - ☐ Process discharge => 5% of TP ADW organic capacity Which organic pollutant? _____ TP ADW organic capacity: _____. Percent: _____
  - ☐ Reasonable potential for adverse effect on operations Why? _____
  - ☐ Reasonable potential for violating PT std or req't Which ones & why? _____
- B. Does company own its bldg (is it listed as the owner in E-CIS)? Yes☒ No☐

If no:
- C. What is Bldg owner name (use DBA if avail.)? _____ (check E-CIS CAPS Customer Info)
- D: What is Bldg owner mailing address? _____ (check E-CIS CAPS Customer Info)

42. IS COMPANY CLASSIFIED AS "Multi-User"? Yes☐ No☒

If yes:
- A. Is company's discharge segregated from other tenants' discharge? Yes☐ No☐
- B. If no to A, does the company own the bldg/receive the MSD bills? Yes☐ No☐
- C. If yes to B, was company informed it is responsible for total discharge, or else must provide segregated sample points? Yes☐ No☐
- D. If no to B, are any Process/P&E Wash-type wastes discharged? Yes☐ No☐
- E. If yes to D, are the wastes completely innocuous? Yes☐ No☐
  (And explain why/why not: _____)
- F. If yes to D, and no to E, company must accept responsibility or provide segregated SP.
  Acceptance letter date: _____ Or write company with requirement ☐
- G. If no to D or yes to E, are limits "alert only" on PT database? Yes☐ No☐
- H. Comments: _____

43. IS COMPANY CLASSIFIED AS "Special Handling/Billing"? Yes☐ No☒

If yes:
- A. Why? _____
- B. Are any changes needed to reasons/details? Yes☐ No☐
- C. If yes, explain: _____
- D. Were company records reviewed & verified for special handling/billing reports? NA☐ Yes☐ No☐
  [including comparison with meters/measuring methods for billing reports]

44. DO MSD CLASSIFICATIONS NEED TO BE REVISED? Yes☐ No☒

If yes:
- A. Indicate correct classifications:
  SIU ☐ Non-Significant CIU ☐ CIU ☐ Surcharge ☐ Non-Toxic Process Water/Wastes ☐
  Toxics-Bearing Waste ☐ No Process Discharge ☐ Multi-User ☐ Special Handling/Billing ☐

B. Explain changes: _____

45. SAMPLE POINTS

						Auto-sampler ready?	DJ (y/n)
SP #		Fed.Reg.		Components:	See attached IDR	N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A
SP #		Fed.Reg.		Components:		N/A	N/A

46. ARE ANY SAMPLE POINTS TRAPPED VENTS? Yes☐ No☒

If yes: A. List SPs: _____

B. Was co. informed that T-vents are preferred, and told why? Yes☐ No☐

47. ARE DISCHARGES AT ANY SPs SMALL/IRREGULAR ENOUGH TO ALLOW GRAB SAMPLES? Yes☒ No☐

If yes: A. List SPs and reasons: SP001 - low flow (sanitary only)

48. ARE THERE ANY UNSAMPLED DISCHARGES? (list each lateral separately) Yes☐ No☒

Dummy SP #		Components:	
Dummy SP #		Components:	

If yes: A. Was company informed that SPs may be required in the future if the discharges change? Yes☐ No☐

B. Are all unsampled discharges very low flow and/or innocuous? Yes☐ No☐

C. If No to B, explain: _____

(Must also write company and require installation of SP)

49. DO ANY SAMPLE POINTS (including Unsampled/Dummy SPs) RECEIVE STORMWATER? Yes☒ No☐

If yes: A. List Sample Points: 001, 003, 008, 009, 010, 011, 080, 099

50. WERE ALL SAMPLE POINTS (except Dummy SPs) OPENED & INSPECTED? No SPs☐ Yes☒ No☐

A. If any SPs cannot be located or opened, explain: _____

B. If any SP descript's need to be changed, explain: _____

C. Is it possible to use an auto-sampler to collect samples (regardless of volume or batches)? Yes☒ No☐

Update PT database indicator as needed.

D. Was ANY grease or other problem/debris observed in any SP? Yes☐ No☒

E. If yes to D, list SPs & describe: _____

F. If yes to D, was company directed to take corrective actions? Yes☐ No☐

51. REVIEW THE SAMPLE POINT MAP! Last map revision date: 12/1/17

A. Is the map correct and accurate in all its details? Yes☒ No☐

B If no, what changes are needed: _____

52. DO INSTRUCTIONS FOR "Contact Prior to Sampling" or FIELD VISIT "Special Instructions" NEED REVISION? Yes☐ No☒

If yes: A. List needed changes: _____

53. IS COMPANY LOCATED WITHIN AN MSD HAZARDOUS AREA BOUNDARY? Yes☒ No☐

If yes: A. Has it been marked as such in the PT database? Yes☒ No☐

USE THIS SPACE FOR ANY OTHER COMMENTS/OBSERVATIONS PERTINENT TO YOUR INSPECTION OF THIS SITE.

The facility has two 65,000 gallon tanks for sewer diversion if needed. There are a few 72 hour outdoor holding areas for barrels/totes/drums/etc. for delivery, staging, etc. These areas are not utilized for long term storage.

Some barrels and totes are tripled rinsed prior to disposal or being sent back to the vendor. The washdown is performed at pad 204. The washdown area is contained. All wastewater is collected in a containment pallet and transported to Building 6 and processed through their PEG system/PT prior to discharge at SP010.

PEG 1 (SP920) and PEG 2 (SP937). APIs are performed in buildings 235 and 245.

Bldg 503 has been demolished.

Majority of the processes at bldgs 6,7,8 have been moved to the manufacturing process at bldg 260. Bldg 250 is also manufacturing.

Maintenance is located in bldg 510. Bldgs 63 and 81 are warehouse. Bldg 25 is being considered for demo.

Building 260 absorbed the majority of the process from building 6.

SPECGX is looking at possiblities to reduce water usage for the stearates process.

Several labs in Bldg 96 were vacant at time of the last inspection. Per Mr. Eckles, lab personnel are slowly moving back into this area.

Notes for contact:
As previously discussed, the facility has been and is currently under several renovation/reorganization projects. Additionally, the number of employees has decreased since the last inspection by approximately 130 people. As a result of the restructuring, several sample points and processes are inactive or idle. Per SPECGX representatives the below sample points are either inactive or idle.

SP912, SP915, SP927, SP930, and SP933 are currently inactive. The bldg which discharges to SP933 will likely be demolished in the future. Based on the ongoing renovations and restructuring, SPECGX plans to submit an updated IUQ in early 2020 as this will provide more time to deliver an acurate representation of the facility's status and discharges as well as limit additional revsions and IUQ submittals.

SP939 - 439 Sub C PSES process includes 200 lbs of Isopropyl Alcohol in 900 gallons of water (less than 3% concentration of IPA in water). The discharge of IPA flows through pH neutralization system. The SO2 scrubber uses caustic solution and recirculates with a periodic blowdown. All water is treated for pH and additional PT at SP010.

Per SPECGX representatives, an abandoned line was identified near SP008. SPECGX plans to investigate this line in the Fall of 2019. Should this line be viable, SPECGX plans to potentially utilize this line in the future. The lateral would be lined and repaired as needed. SPECGX will keep MSD informed on this project.

The Army Corp is looking at FUSRAP remediation work under a few of SPECGX buildings. The stacks at the old boiler and building B&C (old power plant) would need to be demolished before remediation work could begin.

Industrial Data Report

Facility Name:	SPECGX LLC		
Facility Identifier:	1011728100	Facility Type:	Industrial User
Physical Location:	3600 N 2nd STREET Saint Louis, MO 63147	Mailing Address:	3600 N. 2nd Street Saint Louis, MO 63147
MSD Base Map Page / Section:	17 / D4	Facility ID:	353

GENERAL INFORMATION

MSD Sewer Accounts

Account Number	Status
1011728100	Active

Contact Information

First Name:	Last Name:	Title:	Contact Type:	Responsibilities:	Email:	Business Phone:	Cell Phone:
Mr. Jeff	Blaies	Principal Enviromental Engineer	Facility	Authorized Signatory, Field Contact 1st Alt	Jeff.Blaies@mnk.com	314-654-2149	314-239-2736
Mr. Jonathan	Eckles	Environmental Manager	Facility	Authorized Signatory, Field Contact - Primary, Office Contact 1st Alt	Jonathan.Eckles@mnk.com	314-654-0138	314-267-1812
Mr. John	Leonard	Senior Site Director	Facility	Authorized Signatory, Office Contact 2nd Alt		314-654-1879	
Mr. Brett	Shank	EHS Manager	Facility	Authorized Signatory, Billing Contact, Field Contact 2nd Alt, Office Contact - Primary	Brett.Shank@mnk.com	314-654-7695	314-724-4157

Inspection

Template:	Industrial Facility Inspection	Start Date:	05/20/2019 08:15 AM
Inspection Type:	Industrial Facility Inspection	End Date:	05/20/2019 12:45 PM

Industrial Data Report

Facility Groups

Group Name	Group Category	Group Description
414	CFR Process	414: Organic Chemicals, Plastics, and Synthetic Fibers
439	CFR Process	439: Pharmaceutical Manufacturing
CIU	Facility Classification	Categorical Industrial User
RF	Facility Classification	Return Factor Facility
SIU	Facility Classification	Significant Industrial User
SURCH	Facility Classification	Subject to Surcharge
TOX	Facility Classification	Toxics-Bearing Process Water or Wastes
rf_>1000	Return Factor Criteria	Return Factor(s) total >= $1,000/year
rf_Site	Return Factor Criteria	Return Factor(s) requiring site visits due to metering or >= $1,000/year
*CAT	SIU Criteria	Process subject to Categorical Standards under 40 CFR 403.6
*VOL>25K	SIU Criteria	Process Discharge => 25,000 GPD

Permit Information

Permit No.:	1011728100 - 3	Permit Type:	Pretreatment
Effective Date:	12/1/2017 12:00:00AM	Expiration Date:	11/30/2022 12:00:00AM
Issued Date:	12/1/2017 12:00:00AM	Permit Status:	Issued

Industrial Data Report

Work Requirement

Task Template	Start Date	End Date	No. of Time	Frequency	Sample Location
Cont-Mon pH Excursions	07/01/2010	11/30/2022	1	Once/3 mo	
Industrial Facility Inspection	06/01/2004	06/30/2099	1	Once/year	
Radiation Discharge	07/29/2004	11/30/2022	1	Once/3 mo	
Return Factor Inspection	06/01/2018	06/30/2099	1	Once/11 years	
BOD & TSS (T00); COD (T00); Field - pH & Temperature (G00)	12/01/2017	11/30/2022	1	Once/3 mo	001
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Metals - Fe (T04)	12/01/2017	11/30/2022	1	Once/3 mo	002
Acrolein & Acrylonitrile (G00); Semi-Volatiles (Base/Neutrals, Acids) (T04); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	12/01/2017	11/30/2022	1	Once/year	003
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	003
Acrolein & Acrylonitrile (G00); Semi-Volatiles (Base/Neutrals, Acids) (T04); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	12/01/2017	11/30/2022	1	Once/year	005
BOD & TSS (T04); COD (T04); Cyanide-Amenable (G00); Field - pH & Temperature (G00)	12/01/2017	11/30/2022	1	Once/3 mo	005
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	008
Acrolein & Acrylonitrile (G00); Semi-Volatiles (Base/Neutrals, Acids) (T04); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	12/01/2017	11/30/2022	1	Once/year	009
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	009
Acrolein & Acrylonitrile (G00); Metals - Cr, Cu, Ni, Zn (T04); Semi-Volatiles (Base/Neutrals, Acids) (T04); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	12/01/2017	11/30/2022	1	Once/year	010
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	010

Industrial Data Report

BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	011
BOD & TSS (T04); COD (T04); Field - pH & Temperature (G00); Oil & Grease (G00)	12/01/2017	11/30/2022	1	Once/3 mo	080
Cyanide & Cyanide-Amenable (G00); Pharm (A&C), all 10 polls for Long Bottle (G00); Pharm (A&C), all 8 polls for Vol Bottle (G00); Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00); Semi-Volatiles (Base/Neutrals, Acids) (T04); Toxic Organics - Volatiles Only (G00); Vol Orgs-not incl Acr & 2-chloro (group poll only) (G00)	12/01/2017	11/30/2022	1	Once/year	080
OCPSF Organics (G00)	12/01/2017	11/30/2022	1	Once/year	905
Field - Chlorine-Total Residual & pH & Temperature (G00); N,N-Dimethyl Acetamide (G00)	12/01/2017	11/30/2022	1	Once/year	912
Pharm (A&C), all 10 polls for Long Bottle (G00); Pharm (A&C), all 8 polls for Vol Bottle (G00); Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	915
Pharm (A&C), all 10 polls for Long Bottle (G00); Pharm (A&C), all 8 polls for Vol Bottle (G00); Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	920
Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	927
Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	930
Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	933
Pharm (A&C), all 10 polls for Long Bottle (G00); Pharm (A&C), all 8 polls for Vol Bottle (G00); Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	936
Cyanide (G00); Pharm (A&C), all 10 polls for Long Bottle (G00); Pharm (A&C), all 8 polls for Vol Bottle (G00); Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	937
Pharm (B&D) (+A&C), 4 poll (no MeCl) for Short Bot (G00)	12/01/2017	11/30/2022	1	Once/year	938

Industrial Data Report

PRODUCTION/SERVICES INFORMATION

Operation Description: Manufacturer of pharmaceuticals

Shift Information

Shift	Start Time	End Time	Average No. of Employees
1	07:30 AM	03:30 PM	200
2	04:00 PM	12:00 AM	121
3	02:00 PM	10:00 PM	200

SIC

SIC Code	SIC Name	SIC Description
2819	2819	Industrial inorganic chemicals
2833	2833	Medicinals and botanicals
2834	2834	Pharmaceutical preparations
2835	2835	Diagnostic substances
2869	2869	Industrial organic chemicals

Raw Material List

Raw material list has not been entered, or does not exist, for the facility.

CHEMICAL INVENTORY INFORMATION

Industrial Data Report

Full Disclosure of Chemicals

Substance Name	Presence Ind	Categorically Related?
(cis & trans) 1,3-Dichloropropene	Suspected Absent	
1,1,1-Trichloroethane	Known Present	
1,1,2,2-Tetrachloroethane	Known Present	
1,1,2-Trichloroethane	Known Present	
1,1-Dichloroethane	Suspected Absent	
1,1-Dichloroethene	Suspected Absent	
1,2,4-Trichlorobenzene	Suspected Absent	
1,2-Dichlorobenzene	Known Present	Y
1,2-Dichloroethane	Known Absent	Y
1,2-Dichloropropane	Suspected Absent	
1,2-Diphenylhydrazine	Suspected Absent	
1,3-Dichlorobenzene	Suspected Present	
1,4-Dichlorobenzene	Suspected Present	
2,3,7,8-Tetrachlorodibenzo-p-dioxin	Known Absent	
2,4,6-Trichlorophenol	Suspected Absent	
2,4-Dichlorophenol	Suspected Absent	
2,4-Dimethylphenol	Suspected Present	
2,4-Dinitrophenol	Suspected Present	
2,4-Dinitrotoluene	Suspected Present	
2,6-Dinitrotoluene	Suspected Absent	
2-Chloroethyl vinyl ether	Suspected Absent	
2-Chloronaphthalene	Suspected Absent	
2-Chlorophenol	Suspected Present	
2-Nitrophenol	Suspected Present	
3,3-Dichlorobenzidine	Suspected Absent	
4,4'-DDD	Suspected Absent	
4,4'-DDE	Suspected Absent	
4,4'-DDT	Suspected Absent	
4,6-Dinitro-2-Methylphenol	Suspected Absent	
4-Bromophenyl phenyl ether	Suspected Absent	
4-Chloro-3-Methylphenol	Suspected Absent	
4-Chlorophenyl phenyl ether	Suspected Absent	
4-Methyl-2-Pentanone	Known Absent	Y
4-Nitrophenol	Suspected Present	
Acenaphthene	Suspected Absent	
Acenaphthylene	Suspected Absent	
Acetone	Known Present	Y

Industrial Data Report

Acrolein	Suspected Present	
Acrylonitrile	Suspected Present	
Aldrin	Suspected Absent	
Alpha-BHC	Suspected Absent	
Ammonia (as N)	Known Absent	Y
Anthracene	Suspected Absent	
Antimony (Total)	Suspected Present	
Arsenic (Total)	Suspected Present	
Asbestos (Fibrous)	Known Present	
Benzene	Known Present	Y
Benzidine	Suspected Present	
Benzo (A) Anthracene	Suspected Absent	
Benzo (A) Pyrene	Suspected Present	
Benzo (B) Fluoranthene	Suspected Absent	
Benzo (G,H,I) Perylene	Suspected Absent	
Benzo (K) Fluoranthene	Suspected Absent	
Beryllium (Total)	Suspected Absent	
Beta-BHC	Suspected Absent	
Bis (2-Chloroethoxy) Methane	Suspected Absent	
Bis (2-Chloroethyl) Ether	Suspected Absent	
Bis (2-Chloroisopropyl) Ether	Suspected Absent	
Bis (2-EthylHexyl) Phthalate	Known Present	
Bromodichloromethane	Suspected Present	
Bromoform	Suspected Absent	
Bromomethane	Suspected Present	
Butylbenzyl Phthalate	Suspected Absent	
Cadmium (Total)	Known Present	
Carbon Tetrachloride	Known Present	
Chlordane	Suspected Absent	
Chlorobenzene	Known Present	Y
Chloroethane	Suspected Absent	
Chloroform	Known Present	Y
Chloromethane	Known Present	
Chromium (Total)	Known Present	
Chrysene	Suspected Absent	
Copper (Total)	Known Present	
Cyanide (Total)	Known Present	Y
Delta-BHC	Suspected Absent	
Di-n-butyl Phthalate	Suspected Absent	

Industrial Data Report

Di-n-octyl Phthalate	Suspected Absent	
Dibenzo (A,H) Anthracene	Suspected Absent	
Dibromochloromethane	Suspected Present	
Dieldrin	Suspected Present	
Diethyl Phthalate	Suspected Present	
Diethylamine	Known Absent	Y
Dimethyl Phthalate	Known Present	
Endosulfan I	Suspected Absent	
Endosulfan II	Suspected Absent	
Endosulfan Sulfate	Suspected Absent	
Endrin	Suspected Absent	
Endrin Aldehyde	Suspected Absent	
Ethyl Acetate	Known Present	Y
Ethylbenzene	Known Present	
Fluoranthene	Suspected Absent	
Fluorene	Suspected Absent	
Gamma-BHC	Suspected Absent	
Heptachlor	Suspected Absent	
Heptachlor Epoxide	Suspected Absent	
Hexachlorobenzene	Suspected Absent	
Hexachlorobutadiene	Suspected Present	
Hexachlorocyclopentadiene	Suspected Present	
Hexachloroethane	Suspected Present	
Indeno (1,2,3-cd) pyrene	Suspected Absent	
Isobutyraldehyde	Known Absent	Y
Isophorone	Suspected Absent	
Isopropyl Acetate	Known Absent	Y
Isopropyl Ether	Known Absent	Y
Lead (Total)	Known Present	
Mercury (Total)	Known Present	
Methyl Formate	Known Absent	Y
Methylene Chloride	Known Present	Y
n-Amyl Acetate	Known Absent	Y
n-Butyl Acetate	Known Absent	Y
n-Heptane	Known Absent	Y
n-Hexane	Known Absent	Y
N-Nitrosodi-n-Propylamine	Suspected Absent	
N-Nitrosodimethylamine	Suspected Present	
N-Nitrosodiphenylamine	Suspected Absent	

Industrial Data Report

Naphthalene	Suspected Absent	
Nickel (Total)	Known Present	
Nitrobenzene	Suspected Present	
PCB - 1016	Suspected Absent	
PCB - 1221	Suspected Absent	
PCB - 1232	Suspected Absent	
PCB - 1242	Suspected Absent	
PCB - 1248	Suspected Absent	
PCB - 1254	Suspected Absent	
PCB - 1260	Suspected Absent	
Pentachlorophenol	Suspected Absent	
Phenanthrene	Suspected Present	
Phenol	Known Present	
Pyrene	Suspected Absent	
Selenium (Total)	Suspected Absent	
Silver (Total)	Suspected Present	
Tetrachloroethene	Known Present	
Tetrahydrofuran	Known Present	Y
Thallium (Total)	Suspected Absent	
Toluene	Known Present	Y
Toxaphene	Suspected Absent	
Trans-1,2-Dichloroethene	Suspected Absent	
Trichloroethene	Known Present	
Triethylamine	Known Present	Y
Vinyl Chloride	Known Present	
Xylene	Known Present	Y
Zinc (Total)	Known Present	

Industrial Data Report

Process List

Process Name	Process Description	Seasonal?	Status	Process Detail
Non-Sewered: Off-Site Disposal			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Paints or Paint Sludges, Solvents/Thinners
Non-Sewered: On-Site Storage			A	Acids and/or Alkalies, Equipment Oils and/or Grease, Infectious Waste, Kitchen/Food Service Grease, Organic Compounds, Paints or Paint Sludges, Solvents/Thinners
Product/Service	FDA drugs		A	
Product/Service	Industrial chemicals		A	

Control Plans

Name	Type	Approval Date	Status
01029	MDNR - Hazardous Waste Program	11/18/1996	Approved
24-05804-02	Nuclear Regulatory Commission	11/01/1997	Approved
MOD096726484	EPA - Hazardous Waste Program	11/19/1996	Approved
Slug Discharge/Spill Control Plan (start 7/1/2004)	Slug Discharge/Spill Control Plan	07/01/2004	Approved

PROCESS FLOW DETAILS

Process Flow Details

Flow Stream Name	Flow Direction	Flow Type	Status
1011728100	Incoming	Water Supply	A

Flow Data List

Start Date	End Date	Reading Type	Flow Value
01/20/2019	03/16/2019	Total Volume	21348.0000 CCF
09/18/2018	01/19/2019	Total Volume	26158.0000 CCF
06/22/2018	09/17/2018	Total Volume	20425.0000 CCF
04/03/2018	06/21/2018	Total Volume	29937.0000 CCF

Average Daily Volume: 368.31 CCF

Total Average Daily Volume: 368.31 CCF

Industrial Data Report

Facility Flow Methodology

Name	Formula	Flow Start Date	Return Factor
ImportedRF1011728100	(@1011728100) / @1011728100	03/02/2018	0.96

PRETREATMENT INFORMATION

Pretreatment System(s)

Pretreatment Type:	Primary Purpose:	Effective Date:	Sample Location
Filter Press		12/18/2013	905
Microscreening		12/01/2014	010
Oil/Water Interceptor		11/21/2008	010
pH Adjustment/Neutralization		11/05/1998	005
pH Adjustment/Neutralization		11/05/1998	010
pH Adjustment/Neutralization		11/05/1998	080
pH Adjustment/Neutralization		12/18/2013	905
pH Adjustment/Neutralization		12/01/2009	912
pH Adjustment/Neutralization		12/01/2009	930
pH Adjustment/Neutralization		12/01/2009	933
pH Adjustment/Neutralization		12/01/2017	939
Pressure Filters		12/18/2013	927
Steam Stripping		12/01/2014	010
Steam Stripping		02/28/2002	920
Steam Stripping		06/26/2007	937
Ultrafiltration		10/16/1998	809
Carbon Absorption		10/16/1998	809
Chemical Precipitation		10/16/1998	809
Chemical Precipitation		12/18/2013	905
Clarification/Settling		05/10/2017	003
Clarification/Settling		10/16/1998	809

SAMPLE LOCATION INFORMATION

Industrial Data Report

Sample Locations

Location Name	Location Type	Sample Location Description	Status	Flow Stream Name (Fed Regulation)
001	SP - Ordinance Only	MH (Gatewell) at foot of Destrahan 100' E of RR	A	Sanitary (), Storm Water ()
002	SP - Ordinance Only	MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)	A	Sanitary ()
003	SP - Ordinance Only	MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91	A	Flow From Offsite (), Laboratory Waste (), Non-Categorical Process Waste (), Sanitary (), Storm Water ()
005	SP - Ordinance Only	MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)	A	Laboratory Waste (), Non Contact Cooling Water (), Sanitary ()
008	SP - Ordinance Only	Overflow chamber on N side of pump station on W side of storage pad T	A	Emergency Bypass (), Process Waste (), Storm Water ()
009	SP - Ordinance Only	MH in Mallinckrodt St 27' E of Broadway, 4' from S curb	A	Flow From Offsite (), Storm Water ()
010	SP - Ordinance Only	MH w/square lid 50' N of neutralization control building at Hall & Salisbury	A	Boiler Blowdown (), Categorical (), Kitchen Waste (), Laboratory Waste (), Non Contact Cooling Water (), Non-Categorical Process Waste (), Plant & Equipment Washdown (), Process Waste (), Regeneration/Reject Water (), Sanitary (), Storm Water ()
011	SP - Ordinance Only	MH with square lid 18' S from NW corner of bldg 223 under iron ladder	A	Emergency Bypass (), Process Waste (), Storm Water ()
080	SP - Combined (Ordinance/Categorical)	Inlet to sump (double MH) N of building #98	A	Categorical (), Laboratory Waste (), Process Waste (), Sanitary (), Storm Water ()
099	SP - Dummy Point	No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)	A	Laboratory Waste (), Non-Categorical Process Waste (), Plant & Equipment Washdown (), Sanitary (), Storm Water ()
501	SP - Dummy for Data Entry	No physical sample point, for radioactive materials monitoring results only	A	

Industrial Data Report

809	SP - Special Discharge	Construction and decon water from FUSRAP radioactive soil excavation.	A	
905	SP - Categorical Only	MH inside building X, 12' W, 5' S of W door (Total flow out)	A	Categorical (Organic Chemicals, Plastics, and Synthetic Fibers, 414, GH, organics, PSES, mass)
912	SP - Ordinance Only	Valve on discharge line from outdoor Tank #450 on SE corner of Building 504	A	Non-Categorical Process Waste (), Plant & Equipment Washdown (), Process Waste ()
915	SP - Categorical Only	Valve on E side of T-315 at inside NE corner of bldg 6	A	Categorical (Pharmaceutical Manufacturing, 439, C, CN-no, NH3-exempt, PSES)
920	SP - Categorical Only	Valve on discharge line, outside SW corner of diked area E of bldg 512	A	Categorical (Pharmaceutical Manufacturing, 439, C, CN-no, NH3-exempt, PSES)
927	SP - Categorical Only	Tank 308 (acid press tank) in bldg 6	A	Categorical (Pharmaceutical Manufacturing, 439, B, PSES)
930	SP - Categorical Only	Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355	A	Categorical (Pharmaceutical Manufacturing, 439, B, PSES)
933	SP - Categorical Only	Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when disch. 439 waste	A	Categorical (Pharmaceutical Manufacturing, 439, B, PSES)
936	SP - Categorical Only	Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260	A	Categorical (Pharmaceutical Manufacturing, 439, C, CN-no, NH3-exempt, PSES)
937	SP - Categorical Only	Valve on 2nd level on W side near pipe bridge N of bldg 501	A	Categorical (Pharmaceutical Manufacturing, 439, C, CN-no, NH3-exempt, PSES)
938	SP - Categorical Only	6" floor drain in far SW corner of room in Building 5, Room 406	A	Categorical (Pharmaceutical Manufacturing, 439, D, PSNS)

Industrial Data Report

939	SP - Categorical Only	Valve from T-700 and T-710, inside bldg 504	A	Categorical (Pharmaceutical Manufacturing, 439, C, CN-no, NH3-exempt, PSES)
L-01	LAT - Sanitary Or San+Storm (Combined)	Multiple lines from buildings in Plant 6E, East into 12" line	A	
L-02	LAT - Sanitary Or San+Storm (Combined)	6" line SW from Building 96 to Salisbury St	A	
L-04	LAT - Sanitary Or San+Storm (Combined)	6" line West from Bldg 98 to Broadway	A	
L-05	LAT - Sanitary Or San+Storm (Combined)	8" pipe South from Bldg 96 to Salisbury	A	
L-06	LAT - Sanitary Or San+Storm (Combined)	15" line from pump station overflow chamber N to Salisbury	A	
L-07	LAT - Sanitary Or San+Storm (Combined)	Line running N on Hall, then E along Salisbury to interceptor at Wharf	A	
L-10	LAT - Sanitary Or San+Storm (Combined)	18" line North from neutralization system	A	
L-11	LAT - Sanitary Or San+Storm (Combined)	Special discharge 809 location	A	
L-12	LAT - Sanitary Or San+Storm (Combined)	Line flowing NE under bldg 223 to pump station (Plant 5 overflow)	A	
L-99	LAT - Sanitary Or San+Storm (Combined)	Multiple lines from buildings located West of N 2nd St to Salisbury	A	
LR-01	LAT - Radiation Discharge	No physical lateral, for radioactive materials' receiving treatment plant only	A	

Industrial Data Report

Sample Locations Flow Data by Sample Location and Flow Stream

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	1000 GPD

Sample Location: 002 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	2200 GPD

Sample Location: 003 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Flow From Offsite	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	7700 GPD

Laboratory Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	5123 GPD

Non-Categorical Process W	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	2504 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value

Industrial Data Report

	11/27/2017	11/30/2022	Average	5000 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Laboratory Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	1800 GPD

Non Contact Cooling Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	200 GPD

Sample Location: 008 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Emergency Bypass	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 009 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Flow From Offsite	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value

Industrial Data Report

	11/27/2017	11/30/2022	Average	7700 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 010 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Boiler Blowdown	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	10000 GPD

Categorical	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	186735 GPD

Kitchen Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	1200 GPD

Laboratory Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	59200 GPD

Non Contact Cooling Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	15000 GPD

Plant & Equipment Washdo	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value

Industrial Data Report

11/27/2017	11/30/2022	Average	77500 GPD

Process Waste	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	31571 GPD

Regeneration/Reject Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	35000 GPD

Sanitary	Outgoing	Dilution	Continuous

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	10000 GPD

Storm Water	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 905 Auto-Sampler Ready? Y

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	52001 GPD

Sample Location: 912 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Non-Categorical Process W	Outgoing	Dilution	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	66665 GPD

Industrial Data Report

Sample Location: 915 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	500 GPD

Sample Location: 920 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	21600 GPD

Sample Location: 927 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	500 GPD

Sample Location: 930 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 933 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	0 GPD

Industrial Data Report

Sample Location: 936 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	7929 GPD

Sample Location: 937 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	37400 GPD

Sample Location: 938 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	11/27/2017	11/30/2022	Average	40 GPD

Sample Location: 939 Auto-Sampler Ready? N

Flow Stream Name	Flow Direction	Flow Type	Flow Discharge Type
Categorical	Outgoing	Categorical	Batch

Flow Data

Meter	Start Date	End Date	Reading Type	Flow Value
	12/01/2017	11/30/2022	Average	100 GPD

Industrial Data Report

Sample Locations Flow Data by Meter Reads only

Sample Location: 001 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Sanitary		11/27/2017	11/30/2022	Average	1000 GPD

Sample Location: 002 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Sanitary		11/27/2017	11/30/2022	Average	2200 GPD

Sample Location: 003 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Flow From Offsite		11/27/2017	11/30/2022	Average	7700 GPD
Laboratory Waste		11/27/2017	11/30/2022	Average	5123 GPD
Non-Categorical Process Waste		11/27/2017	11/30/2022	Average	2504 GPD
Sanitary		11/27/2017	11/30/2022	Average	5000 GPD
Storm Water		11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 005 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Laboratory Waste		11/27/2017	11/30/2022	Average	1800 GPD
Non Contact Cooling Water		11/27/2017	11/30/2022	Average	200 GPD

Sample Location: 008 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Emergency Bypass		11/27/2017	11/30/2022	Average	0 GPD
Storm Water		11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 009 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Flow From Offsite		11/27/2017	11/30/2022	Average	7700 GPD
Storm Water		11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 010 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Boiler Blowdown		11/27/2017	11/30/2022	Average	10000 GPD
Categorical		11/27/2017	11/30/2022	Average	186735 GPD
Kitchen Waste		11/27/2017	11/30/2022	Average	1200 GPD
Laboratory Waste		11/27/2017	11/30/2022	Average	59200 GPD

Industrial Data Report

Non Contact Cooling Water	11/27/2017	11/30/2022	Average	15000 GPD
Plant & Equipment Washdown	11/27/2017	11/30/2022	Average	77500 GPD
Process Waste	11/27/2017	11/30/2022	Average	31571 GPD
Regeneration/Reject Water	11/27/2017	11/30/2022	Average	35000 GPD
Sanitary	11/27/2017	11/30/2022	Average	10000 GPD
Storm Water	11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 905 Auto-Sampler Ready? Y

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	52001 GPD

Sample Location: 912 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Non-Categorical Process Waste		11/27/2017	11/30/2022	Average	66665 GPD

Sample Location: 915 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	500 GPD

Sample Location: 920 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	21600 GPD

Sample Location: 927 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	500 GPD

Sample Location: 930 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 933 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	0 GPD

Sample Location: 936 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	7929 GPD

Industrial Data Report

Sample Location: 937 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	37400 GPD

Sample Location: 938 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		11/27/2017	11/30/2022	Average	40 GPD

Sample Location: 939 Auto-Sampler Ready? N

Flow Stream	Meter	Start Date	End Date	Reading Type	Flow Value
Categorical		12/01/2017	11/30/2022	Average	100 GPD

Industrial Data Report

Associated Sample Locations

Location Name	Associated Location Name	Associated Location Status
L-01	001	A
L-02	002	A
L-04	004	I
	080	A
	081	I
	082	I
L-05	005	A
L-06	008	A
L-07	007	I
L-10	010	A
	826	I
	904	I
	905	A
	906	I
	909	I
	911	I
	912	A
	913	I
	914	I
	915	A
	916	I
	917	I
	918	I
	919	I
	920	A
	921	I
	922	I
	923	I
	924	I
	925	I
	926	I
	927	A
	928	I
	929	I

Industrial Data Report

	930	A
	931	I
	932	I
	933	A
	934	I
	935	I
	936	A
	937	A
	938	A
	939	A
	981	I
	982	I
L-12	011	A
L-99	003	A
	009	A
	099	A
LR-01	501	A

ADDITIONAL COMMENTS

Facility Comments

Comment Type	Comment
Facility Access	To Provide Flow Measurement Form
Facility in MSD Hazardous Boundary	Facility located in MSD Hazardous Boundary Area
Facility Special Instructions	Flow Measurement Form only needed when collecting SP905 annual sample. Turn off wireless phones - "flash" danger. SP927 will be collected by company, while MSD observes, for safety reasons. SP938 will be collected by company, while MSD observes from window in door of Clean Room 406. SP009 is an upstream point (SP003 is downstream). If a violation or questionable sample is collected from the upstream point, samplers should check for an upstream source of the problem. SP912's N,N-Dimethyl Acetamide is not normally analyzed by MSD. After collection of the sample, the lab will be notified if it needs to be contracted to an outside lab for analysis. SP011: upstream overflow point - check w/ contact to see if overflow is occurring Company continuously monitors pH at SP010. If a pH 'violation' is detected, Field Notice of Discharge Violation still should be given to company, but "Potential" should be written at the top. (Continuous monitoring allows for excursions of up to 60 minutes.)

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when discharging 439 waste

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator building 8' from S wall in SE corner of building 260

AVERAGE WASTEWATER FLOW (GPD): 16,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo

SAMPLING POINT REFERENCE NUMBER: 936
(continued)

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/year
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of building 501

AVERAGE WASTEWATER FLOW (GPD): 23,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 71

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by July 28, 2013. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to

continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. PROHIBITED DISCHARGES

A.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point **905**. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point **905**.

B. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

B.1.. No Monitoring When Influenced by Storm Runoff

Sampling points **003, 008, 009, 010, 011, and 080** may, at times, convey storm water in addition to wastewater regulated by this permit. The self-monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

B.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point **009** and "downstream" sampling point **003**. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point **099**. Permittee shall perform monitoring at both **009** and **003** within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at **099**, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; UF = upstream flow rate
DC = downstream concentration; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

B.3. Special Sampling and Analytical Procedures – Sample Points 008 and 011

The permittee shall monitor sampling points **008** and **011** for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

B.4. Special Sampling and Analytical Procedures – Sample Point 912

Discharges at sampling point **912** shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

B.5. Special Sampling and Analytical Procedures – Sample Point 938

Since the operation at Sample Point **938** is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

B.6. Special Sampling and Analytical Procedures – Net/Gross Allowance Monitoring

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points **080** and **936**; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

C. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

C.1. Sampling Not Required at Non-Toxic/Low-Flow Point

The permittee is not required to sample discharges at sampling points **001** and **002**, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

C.2. Special Certification and Reporting Requirements – Sample Points 930, 933 and 936

For sampling points **930**, **933**, and **936** permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points **930**, **933**, and **936** are adhered to.

C.3. Determination of Absence of Regulated Pollutants

The permittee has determined that Diethylamine and Triethylamine, regulated under 40 CFR 439, Subpart C, are neither used nor generated in pharmaceutical manufacturing operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records. The permittee must maintain the documentation for this determination in the facility permit records, for a period of at least three (3) years following expiration of this permit. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

C.4. Absence Certification of Regulated Pollutants & Once per Year Sampling – Sample Points 915 and 936

Based on the determination referenced above and on permittee's verification that Diethylamine and Triethylamine, regulated under 40 CFR 439, Subpart C, are absent in the process wastewater discharged from regulated categorical operations at categorical sampling points **915** and **936**, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

In the event that a pollutant exempt from sampling by the permittee is found to be present or is expected to be present based on changes that occur in the permittee's operations, the permittee must immediately notify the District of such findings and begin sampling for the pollutant at least once per 3 months, unless a different frequency is subsequently specified by the District.

C.5. 439 Surrogate Recommendation & Certification – Sample Points 920 and 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling points **920** and **937**. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

C.6. Sampling Not Required at Connections with NO Sample Points and with Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

C.7. No Sampling at Connections Between Upstream and Downstream Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

C.8. Certification of No Cyanide Under 40 CFR 439

The permittee has reported that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling points **080**, **915**, **920**, **936** and **937**. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

C.9. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

C.10. Reporting of Results Under Mass Discharge Limits – Sample Point 905

The limitations at sampling point **905** are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

C.11. Reporting Continuous pH Monitoring Data – Sample Point 010

The permittee has chosen to employ continuous monitoring techniques for pH at sampling point **010**, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

D. SPECIAL BILLING REPORTING REQUIREMENTS

D.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Sewer Service Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on **ninety-six (96) percent** of the used water (on an annual basis) being discharged to the District. The permittee shall notify the District's Department of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

D.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Sewer Service Charge Ordinances, the permittee is currently subject to surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and/or Total Suspended Solids (TSS). As of July 21, 2011, the permittee's surcharge billing values are: 415 mg/l for BOD, 825 mg/l for COD, and 68 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

E. DERIVATION OF LIMITATIONS

E.1. Ammonia Limits Under 40 CFR 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT LLC**

Permit No: **1011728100 -1** Effective Date: June 01, 2013 Expiration Date: May 31, 2015

Premise Address: **3600 North Second Street, 63147**

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points **001 and 002**. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points **008 and 011**.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by Sample Point **905**).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points **080, 915, 920, 936, and 937**, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	CATEGORICAL POLLUTANTS NOT USED OR GENERATED IN CATEGORICAL OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points , subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points **920 and 937** subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

MSD

DOCUMENTATION FORM for PERMIT REVISION

Company Name: **MALLINCKRODT LLC**

Location: **3600 N 2nd St**

Former Permit No: **2112059600 - 3.1** Original Effective Date: **5/1/2011**

Revised Permit No: **1011728100 -1** Revision Effective Date: **6/1/2013**

WHY – Cite regulation, policy, etc. and identify any other documents which support the revision:

Inspection report has identified SP935 as inactive and no longer used.

WHAT – Briefly explain what is to be revised and then list the pages & how affected:

Remove SP935 and montioring requirements from permit.

Pg. # 1 **Removed 935 from list of sample points**

Pg. # 8 **Removed 935 from SP010 and updated flow**

Pg. # 21 **Updated flow at SP930 to 1800 GPD per 6/20/12 entry in the permit comment field**

Pg. # 23 **Removed SP935 and monitoring requirements**

Pg. # 36 **Removed SP935 from SC C.4 (E.23) "439 Absence Cert & Once/yr Sampling" and corrected description to 40 CFR Subpart "C" per 5/30/12 entry in the permit comment field.**

Pg. # 37 **Removed SP935 from SC C.8 (E.15) "Cert of No Cyanide"**

Pg. # 38 **Updated the Surcharge Values SC D.2 (F.2)**

SMR Start Dates for any new requirements:
Once/3 mo: 4/1/2014 or ☐ no new requirements
Once/6 mo: _____ or ☒ no new requirements
Once/year: _____ or ☒ no new requirements

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Pollutant & Limitations Documentation Sheets:	☒	☐	☐
Production Based Standards Calculation Sheets: If Yes, for SPs: _____	☐	☐	☒
Most Strict Standards Calculation Sheets: If Yes, for SPs: _____	☐	☐	☒
Combined Wastestream Calculations Sheets: If Yes, for SPs: _____	☐	☐	☒
Text of any Customized Special Conditions: If Yes, for which SCs: _____	☐	☐	☒

Other: _____

Prepared by: Chris Bulmahn	Date: 5/14/2013
Reviewed by: [illegible]	Date: 5-27-13

PERMIT NO: 1011728100 -1

SAMPLING POINT REFERENCE NUMBER: 010 **TYPE:** Ord ☒ Cat ☐ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒

Wastewater Components: Cooling Tower Blowdown + Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 936, 937 and 938) + Non-Categorical Process Waste + Laboratory Waste + Sanitary + Boiler Blowdown + Plant & Equipment Washdown + Kitchen Waste + Non-Contact Cooling Water + Regeneration/Reject Water + Storm Water

Flow Rate: 1,118,137 Units: GPD Basis for Flow Rate: Inspection Report

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015814

PERMIT NO: 1011728100 -1

CHANGES TO

Special Certifications & General Reports for Special Conditions not tied to specific sample points

ADDITIONS:	Special Conditions:	# F.2 ,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	SMR Cert Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____
	Gen Rpt Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]

Are the ADDITIONAL SMR certs associated with first permit sample point (_____)? YES ☐ NO ☐

DELETIONS:	Special Conditions:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____

Were the DELETED SMR certs removed from the first permit sample point (_____)? YES ☐ NO ☐

Check here if there are no changes to non-SP-specific Special Certifications or General Reports: ☐

MSD 015815

PERMIT NO: 1011728100 -1

SAMPLING POINT REFERENCE NUMBER: 930 **TYPE:** Ord ☐ Cat ☒ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒
Wastewater Components: Categorical (439 Sub B PSES)
Flow Rate: 1,800 Units: GPD Basis for Flow Rate: email 6/20/12

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015816

PERMIT NO: 1011728100 -1

SAMPLING POINT REFERENCE NUMBER: 935 **TYPE:** Ord ☐ Cat ☒ Comb ☐ **NEW SP** ☐ **or CHANGE to SP** ☒

Wastewater Components: Deactivated

Flow Rate: NA Units: _____ Basis for Flow Rate: Inspection Report

FOR SPs WITH CHANGES, COMPLETE ONLY WHAT HAS CHANGED:

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation	Monitoring frequency	Basis for monitoring frequency	Any OK?
GENERAL:					
FLOW			[none]		
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/ CATEGORICAL:					
Pharmaceuticals (long list)	Categorical	439 Sub C, PSES	once 3 mo	Deactivated	☐
Diehtylamine	Categorical	439 Sub C, PSES	once/year	Deactivated	☐
Triethylamine	Categorical	439 Sub C, PSES	once/year	Deactivated	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.23	# E.15	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# H	# F	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

MSD 015817

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

April 7, 2011

Julie Summers
Environmental Manager
MALLINCKRODT INC.
3600 North Second Street
St. Louis, MO 63147

Re: Discharge Permit No: 2112059600-3.1
For premise at: 3600 N Second Street, St Louis, MO 63147

Dear Ms. Summers:

Your Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit issued on June 1, 2010, for the above premise, is hereby revised as per the attached revised permit.

The following special condition was added to the permit:

- Special Condition B.6 allows net/gross compliance monitoring for chloroform. This allowance was included in previous permits.

We have reissued the entire permit for your convenience. Please replace your prior permit with this letter and the revised permit. The terms of the revised permit supersede your prior permit.

You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals.

This revision does not affect any monitoring or analysis of your discharge that may be necessary to comply with other requirements of your permit and in no way relieves you of your obligations to achieve the discharge limitations as provided in the permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Industrial Wastewater Discharge Permit, Self-monitoring Report Form

cc: Doug Mendoza
Jason Gill

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 2112059600 - 3.1

EFFECTIVE DATE: May 01, 2011
EXPIRATION DATE: May 31, 2015

ISSUED TO: MALLINCKRODT INC
3600 N 2nd St
St. Louis, MO 63147

SIC NUMBER(S): 2816, 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 21
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,000

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD] **See Section II.C.1.**	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD] **See Section II.C.1.**	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 29,142

WASTEWATER SOURCE AND CATEGORY: Sanitary + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Non Categorical Process Waste (Machine shop, painting, parts washing) + Flow From Upstream Sample Point (From SP 009) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 32,000

WASTEWATER SOURCE AND CATEGORY: Non Contact Cooling Water + Laboratory Waste (R&D waste (including 439 from bldg 96))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Oveflow chamber on N side of pump station on W side of building T

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Pump station bypass to Salisbury trunk)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 11,000

WASTEWATER SOURCE AND CATEGORY: Flow From Offsite (Offsite W of Broadway) + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 1,142,913

WASTEWATER SOURCE AND CATEGORY: Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938) + Non Cat. Process Waste + Laboratory Waste + Sanitary + Boiler Blowdown + Plant & Equipment Washdown + Kitchen Waste + Non Contact Cooling Water + Regeneration / Reject Water + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Overflow from Plant 5)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 3,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no)) + Laboratory Waste + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo

SP 080 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 18,142

WASTEWATER SOURCE AND CATEGORY: Storm Water + Laboratory Waste + Non Categorical Process Waste + Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

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DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 100,000

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	74	Monthly Avg	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	301	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	12	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	48	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	23	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	68	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	217	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	301	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	54	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	144	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	25	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	105	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	30	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	61	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	218	Daily Max	Once/3 mo
Acenaphthene [g/Day]	7	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	18	Daily Max	Once/3 mo
Anthracene [g/Day]	7	Monthly Avg	Once/3 mo
Anthracene [g/Day]	18	Daily Max	Once/3 mo
Benzene [g/Day]	22	Monthly Avg	Once/3 mo
Benzene [g/Day]	51	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	98	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	36	Monthly Avg	Once/3 mo

SP 905 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Carbon Tetrachloride [g/Day]	144	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	54	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	144	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	112	Daily Max	Once/3 mo
Chloroethane [g/Day]	42	Monthly Avg	Once/3 mo
Chloroform [g/Day]	123	Daily Max	Once/3 mo
Chloroform [g/Day]	42	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	112	Daily Max	Once/3 mo
Chloromethane [g/Day]	42	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	16	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	17	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	43	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	7	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	18	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	144	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	54	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Fluoranthene [g/Day]	8	Monthly Avg	Once/3 mo
Fluoranthene [g/Day]	20	Daily Max	Once/3 mo
Fluorene [g/Day]	7	Monthly Avg	Once/3 mo
Fluorene [g/Day]	18	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	301	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	144	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	54	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	74	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	301	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	64	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	14	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	7	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	18	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	847	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	2423	Daily Max	Once/3 mo
Phenanthrene [g/Day]	18	Daily Max	Once/3 mo
Phenanthrene [g/Day]	7	Monthly Avg	Once/3 mo
Pyrene [g/Day]	8	Monthly Avg	Once/3 mo
Pyrene [g/Day]	18	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	62	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	20	Monthly Avg	Once/3 mo
Toluene [g/Day]	11	Monthly Avg	Once/3 mo
Toluene [g/Day]	28	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	9	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	25	Daily Max	Once/3 mo

SP 905 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Trichloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	26	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	65	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	37	Monthly Avg	Once/3 mo

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 150,000

WASTEWATER SOURCE AND CATEGORY: Non Categorical Process Waste (ASI process waste from bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
N,N-Dimethyl Acetamide [LBS/Day]	5,459	Monthly Avg	Once/mo
N,N-Dimethyl Acetamide [LBS/Day]	7,091	Daily Avg	Once/mo

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, MH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.10	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

SP 915 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

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** See Section I.A.2 of the permit conditions.

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**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of bldg 512

AVERAGE WASTEWATER FLOW (GPD): 13,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 650

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when disch. 439 waste

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 935

SAMPLING POINT LOCATION: 1/2" steel pipe on inside of concrete wall S of North stairs - Bldg 512

AVERAGE WASTEWATER FLOW (GPD): 26,000

WASTEWATER SOURCE AND CATEGORY: Categorical (Cat. 439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

SP 935 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260

AVERAGE WASTEWATER FLOW (GPD): 16,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year

SP 936 (cont.)

Parameter	Limit *	Limit Type **	Sampling Frequency
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of bldg 501

AVERAGE WASTEWATER FLOW (GPD): 23,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 71

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by July 28, 2011. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to

continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. PROHIBITED DISCHARGES

A.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point 905. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point 905.

B. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

B.1. No Monitoring When Influenced by Storm Runoff

Sampling points 003, 008, 009, 010, 011, and 080 may, at times, convey storm water in addition to wastewater regulated by this permit. The self monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

B.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point 009 and "downstream" sampling point 003. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point 099. Permittee shall perform monitoring at both 009 and 003 within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at 099, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; UF = upstream flow rate
DC = downstream concentration; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

B.3. Special Sampling and Analytical Procedures – SP 008 and 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

B.4. Special Sampling and Analytical Procedures – SP 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

B.5. Special Sampling and Analytical Procedures – SP 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

B.6. Special Sampling and Analytical Procedures – Net / Gross Allowance Monitoring

MSD is authorizing the permittee to utilize a net/gross allowance for compliance monitoring for chloroform at sampling points 080 and 936; this is allowable under 40 CFR 403.15. The permittee shall report the measured value of the raw (incoming) water, the measurement at each sample point, and the adjusted value for chloroform.

C. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

C.1. Sampling Not Required at Non-Toxic / Low-Flow Point

The permittee is not required to sample discharges at sampling points 001 and 002, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

C.2. Special Certification and Reporting Requirements – SP 930, 933, 936

For sampling points 930, 933, and 936 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, and 936 are adhered to.

C.3. 439 Determination of Absence of Regulated Pollutants

The permittee has determined that certain pollutants, regulated under 40 CFR 439, Subpart C, are neither used nor generated in pharmaceutical manufacturing operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

C.4. 439 Absence Certification & Once per Year Sampling – SP 915, 935, 936

Based on the determination referenced above and on permittee's verification that all pollutants regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from pharmaceutical manufacturing operations at pharmaceutical sampling points 915, 935, and 936, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

C.5. 439 Surrogate Recommendation & Certification – SP 920 and 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling point(s) 920 and 937. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

C.6. Sampling Not Required at Connections with NO Sample Point and with Sample Points on parts

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

C.7. No Sampling at Connections Between Up & Down SPs

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

C.8. Certification of No Cyanide Under 40 CFR 439

The permittee has reported that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling sampling points 080, 915, 920, 935, 936 and 937. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

C.9. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined
(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

C.10. Reporting of Results Under Mass Discharge Limits – SP 905

The limitations at sampling point 905 are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

C.11. Reporting Continuous pH Monitoring Data – SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at at sampling point 010, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

D. SPECIAL BILLING REPORTING REQUIREMENTS

D.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Sewer Service Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on ninety-six (96) percent of the used water (on an annual basis) being discharged to the District. The permittee shall notify the District's Department of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

D.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Sewer Service Charge Ordinances, the permittee is currently subject to surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and/or Total Suspended Solids (TSS). As of July 6, 2009, the permittee's surcharge billing values are: 431 mg/l for BOD, 947 mg/l for COD, and 83 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

E. DERIVATION OF LIMITATIONS

E.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's Bissell Treatment Plant no longer has nitrification capability, Mallinckrodt will be required to achieve the standards for ammonia (as N).

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT INC.**

Permit No: 2115059600-3.1 Effective Date: 05-01-2011 Expiration Date: 05-31-2015

Premise Address: 3600 North Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following. Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points 001 and 002. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points 008 and 011.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by SP 905).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points.080, 915, 920, 935, 936, and 937, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	PHARMACEUTICAL POLLUTANTS NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points 915, 935, and 936, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points 920 and 937 subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

MSD

DOCUMENTATION FORM for PERMIT REVISION

Company Name: **MALLINCKRODT INC**

Location: **3600 North Second Street, 63147**

Former Permit No: **2112059600-3** Original Effective Date: **6-1-10**

Revised Permit No: **2112059600-3.1** Revision Effective Date: **5/1/2011**

WHY – Cite regulation, policy, etc. and identify any other documents which support the revision:

MSD memo from D. Mendoza 12/7/1999 addressing net/gross calculation for chloroform monitoring, allowed under 40 CFR 403.15; used in permits 6/2000-6/2006; e-mail from J. Summers (Mallinckrodt), 4/1/2011, confirming the sampling of incoming raw water and discharge process water at SP080 & 936.

WHAT – Briefly explain what is to be revised and then list the pages & how affected:

Adding one special condition (D.12/B.6) for net/gross allowance monitoring.

Pg. # 1 **Permit #, Eff. date**

Pg. # 30 **First report due date**

Pg. # 35 **Spec Cond B.6 (D.12) was re-added to the permit.**

Pg. # _____ _____

Pg. # _____ _____

SMR Start Dates for any new requirements:
Once/3 mo: _____ or ☒ no new requirements
Once/6 mo: _____ or ☒ no new requirements
Once/year: _____ or ☒ no new requirements

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Pollutant & Limitations Documentation Sheets:	☐	☐	☒
Production Based Standards Calculation Sheets: If Yes, for SPs: _____	☐	☐	☒
Most Strict Standards Calculation Sheets: If Yes, for SPs: _____	☐	☐	☒
Combined Wastestream Calculations Sheets: If Yes, for SPs: _____	☐	☐	☒

Other: E-mail from J. Summers of Mallinckrodt;

Prepared by: S. Rehmer	Date: 4/4/2011
Reviewed by: D Mendoza	Date: 4-6-11

CHANGES TO

Special Certifications & General Reports for Special Conditions not tied to specific sample points

ADDITIONS:	Special Conditions:	# B.6 (D.12),	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	SMR Cert Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____
	Gen Rpt Frequency:	[none],	[none],	[none],	[none],	[none],	[none],	[none]

Are the ADDITIONAL SMR certs associated with first permit sample point (001)? YES ☒ NO ☐

DELETIONS:	Special Conditions:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related SMR Certs:	# _____,	# _____,	# _____,	# _____,	# _____,	# _____,	# _____
	Related General Rpt:	_____,	_____,	_____,	_____,	_____,	_____,	_____

Were the DELETED SMR certs removed from the first permit sample point (_____)? YES ☐ NO ☐

Check here if there are no changes to non-SP-specific Special Certifications or General Reports: ☐

MSD 015860

Jason Gill

MALLINCKRODT
2112-0596-00

From: Summers, Julie [Julie.Summers@Covidien.com]
Sent: Friday, April 01, 2011 4:10 PM
To: Jason Gill
Subject: Chloroform in Incoming City Water

Jason,

Based on our call yesterday, the sample points where we account for chloroform in incoming water are SP080 and SP936.

Please let me know if you need additional information.

Thanks,
Julie Summers
Environmental Manager
Covidien/Mallinckrodt
3600 North 2nd Street
St. Louis, MO 63147
314-654-1969 Phone
314-654-1251 Fax

Metropolitan St. Louis Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

May 25, 2010

Lisa Meyer, HS&E Engineer
MALLINCKRODT INC.
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 2112059600 - 3
For premise at: 3600 North Second Street, 63147

Dear Ms. Meyer:

The Metropolitan St. Louis Sewer District has developed an Industrial Wastewater Discharge Permit for the above premise. Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. As noted in the draft permit, changes include:

- The removal of sample points 918 and 932
- The sampling frequency of sample point 912 reduced from weekly to monthly

The enclosed permit will become effective on June 01, 2010, and will expire on May 31, 2015. You must submit monitoring reports on a quarterly basis, as required by the conditions of this permit. The first report due date, for this reissued permit, is based on a complete calendar quarter monitoring period. The permittee remains responsible for reporting for the preceding calendar quarter under the previous permit. The necessary report form is appended to the permit. It includes the specific certifications required by your permit. Please use this form for your report submittals. Instructions for completing the report form also are enclosed with this letter.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Industrial Wastewater Discharge Permit,
Self-monitoring Report Forms, Self-monitoring Report Instructions

cc: Doug Mendoza
Jason Gill

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 2112059600 - 3

EFFECTIVE DATE: June 01, 2010
EXPIRATION DATE: May 31, 2015

ISSUED TO: MALLINCKRODT INC
3600 North Second Street
St. Louis, MO 63147

SIC NUMBER(S): 2816, 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 21
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,000

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 29,142

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non Categorical Process Waste (Machine shop, painting, parts washing) + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Flow From Upstream Sample Point (From 009)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	****	Instant	Once/3 mo
Temperature [Deg C]	****	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	****	Instant	Once/year
pH [SU]	****	Instant	Once/3 mo
pH [SU]	****	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** No limits; monitoring requirement only for calculation at SP 099.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 32,000

WASTEWATER SOURCE AND CATEGORY: Non Contact Cooling Water + Laboratory Waste (R&D waste (including 439 from bldg 96))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Oveflow chamber on N side of pump station on W side of building T

AVERAGE WASTEWATER FLOW (GPD): 0 (maximum flow 1,440,000 gpd)

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Pump station bypass to Salisbury trunk)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 11,000

WASTEWATER SOURCE AND CATEGORY: Flow From Offsite (Offsite W of Broadway, Upstream SP (To 003))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	****	Instant	Once/3 mo
Temperature [Deg C]	****	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	****	Instant	Once/year
pH [SU]	****	Instant	Once/3 mo
pH [SU]	****	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** No limits; monitoring requirement only for calculation at SP 099.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 1,142,913

WASTEWATER SOURCE AND CATEGORY: Boiler Blowdown + Plant & Equipment Washdown + Regeneration/Reject Water + Kitchen Waste + Storm Water + Sanitary + Laboratory Waste + Non Categorical Process Waste + Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938) + Non Contact Cooling Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0 (maximum flow 14,000 gpd)

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Overflow from Plant 5)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 3,500

WASTEWATER SOURCE AND CATEGORY: Lab Waste + Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 57,600

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non Categorical Process Waste + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 100,000

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	74	Monthly Avg	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	301	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	12	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	48	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	23	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	68	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	217	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	301	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	54	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	144	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	25	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	105	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	30	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	61	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	218	Daily Max	Once/3 mo
Acenaphthene [g/Day]	7	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	18	Daily Max	Once/3 mo
Anthracene [g/Day]	7	Monthly Avg	Once/3 mo
Anthracene [g/Day]	18	Daily Max	Once/3 mo
Benzene [g/Day]	22	Monthly Avg	Once/3 mo
Benzene [g/Day]	51	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	98	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	36	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Carbon Tetrachloride [g/Day]	144	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	54	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	144	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	112	Daily Max	Once/3 mo
Chloroethane [g/Day]	42	Monthly Avg	Once/3 mo
Chloroform [g/Day]	123	Daily Max	Once/3 mo
Chloroform [g/Day]	42	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	112	Daily Max	Once/3 mo
Chloromethane [g/Day]	42	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	16	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	17	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	43	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	7	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	18	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	144	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	54	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Fluoranthene [g/Day]	8	Monthly Avg	Once/3 mo
Fluoranthene [g/Day]	20	Daily Max	Once/3 mo
Fluorene [g/Day]	7	Monthly Avg	Once/3 mo
Fluorene [g/Day]	18	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	301	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	144	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	54	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	74	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	301	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	64	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	14	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	7	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	18	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	847	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	2423	Daily Max	Once/3 mo
Phenanthrene [g/Day]	18	Daily Max	Once/3 mo
Phenanthrene [g/Day]	7	Monthly Avg	Once/3 mo
Pyrene [g/Day]	8	Monthly Avg	Once/3 mo
Pyrene [g/Day]	18	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	62	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	20	Monthly Avg	Once/3 mo
Toluene [g/Day]	11	Monthly Avg	Once/3 mo
Toluene [g/Day]	28	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	9	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	25	Daily Max	Once/3 mo
Trichloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	26	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Vinyl Chloride [g/Day]	65	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	37	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 150,000

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process (ASI process waste from bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/month
N,N-Dimethyl Acetamide [LB / DAY]	7,091	Daily Avg	Once/month
N,N-Dimethyl Acetamide [LB / DAY]	5,459	Monthly Avg	Once/month

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.10	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of bldg 512

AVERAGE WASTEWATER FLOW (GPD): 13,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no,NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 650

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when disch. 439 waste

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 935

SAMPLING POINT LOCATION: 1/2" steel pipe on inside of concrete wall S of North stairs - Bldg 512

AVERAGE WASTEWATER FLOW (GPD): 26,000

WASTEWATER SOURCE AND CATEGORY: Categorical (Cat. 439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260

AVERAGE WASTEWATER FLOW (GPD): 16,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year

Parameter	Limit *	Limit Type **	Sampling Frequency
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of bldg 501

AVERAGE WASTEWATER FLOW (GPD): 23,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 71

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data., For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by October 28, 2010. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to

continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. PROHIBITED DISCHARGES

A.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point 905. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point 905.

B. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

B.1. No Monitoring When Influenced by Storm Runoff

Sampling points 003, 008, 009, 010, 011, and 080 may, at times, convey storm water in addition to wastewater regulated by this permit. The self monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

B.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point 009 and "downstream" sampling point 003. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point 099. Permittee shall perform monitoring at both 009 and 003 within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at 099, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; UF = upstream flow rate
DC = downstream concentration; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

B.3. Non-Standard Special Sampling and Analytical Procedures – SP 008 and 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

B.4. Non-Standard Special Sampling and Analytical Procedures – SP 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

B.5. Non-Standard Special Sampling and Analytical Procedures – SP 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

C. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

C.1. Sampling Not Required at Non-Toxic / Low-Flow Point

The permittee is not required to sample discharges at sampling points 001 and 002, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

C.2. 439 Absence Certification & Once per year Sampling

Based on the determination referenced above and on permittee's verification that all pollutants regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from pharmaceutical manufacturing operations at pharmaceutical sampling points 915, 930, 935, and 936, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

C.3. 439 Surrogate Recommendation & Certification – SP 920 and 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling point(s) 920 and 937. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

C.4. Sampling Not Required at Unsampled & Partly Sampled Connections

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

C.5. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

C.6. Certification of No Cyanide Under 439

The permittee has reported that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling sampling points 080, 915, 920, 935, 936 and 937. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

C.7. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined

(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

C.8. Reporting of Results Under Mass Discharge Limits – SP 905

The limitations at sampling point 905 are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

C.9. Reporting Continuous pH Monitoring Data – SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at at sampling point 010, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

C.10. Non-Standard Special Certification and Reporting Requirements – SP 930, 933, 936

For sampling points 930, 933, and 936 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, and 936 are adhered to.

C.11 439 Determination of Absence of Regulated Pollutants

The permittee has determined that certain pollutants, regulated under 40 CFR 439, Subpart C, are neither used nor generated in pharmaceutical manufacturing operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

D. SPECIAL BILLING REPORTING REQUIREMENTS

D.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Sewer Service Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on ninety-six (96) percent of the used water (on an annual basis) being discharged to the District. The permittee shall notify the District's Department of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

D.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Sewer Service Charge Ordinances, the permittee is currently subject to surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and/or Total Suspended Solids (TSS). As of July 6, 2009, the permittee's surcharge billing values are: 431 mg/l for BOD, 947 mg/l for COD, and 83 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

E. DERIVATION OF LIMITS

E.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's BissellTreatment Plant no longer has nitrification capability, Mallincrodt will be required to achieve the standards for ammonia (as N).

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT INC.**

Permit No: 2115059600-3 Effective Date: 06-01-2010 Expiration Date: 05-31-2015

Premise Address: 3600 North Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following.
Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS.**

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points 001 and 002. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points 008 and 011.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by SP 905).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points 080, 915, 920, 935, 936, and 937, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	PHARMACEUTICAL POLLUTANTS NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points 915, 935, and 936, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points 920 and 937 subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

Metropolitan St. Louis
Sewer District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

MSD

April 22, 2010

Lisa Meyer, HS&E Engineer
MALLINCKRODT INC.
3600 N. 2nd Street
St. Louis, MO 63147

Re: Discharge Permit No: 2112059600 - 3
For premise at: 3600 North Second Street
St. Louis, MO 63147

Dear Ms. Meyer:

The Metropolitan St. Louis Sewer District has completed its review of your application for renewal of the Industrial Wastewater Discharge Permit for the above premise. The current permit becomes effective on June 1, 2010, and will expire on May 31, 2015.

Federal regulation 40 CFR 403 requires MSD to issue a permit to you. We based the draft permit on the following: information that you supplied in your Industrial User Questionnaire, on results from previous wastewater samplings and inspections, and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. Changes include:

- The removal of sample points 918 and 932
- The sampling frequency of sample point 912 reduced from weekly to monthly

Please review this draft copy carefully. If you disagree with any of the terms or conditions of the proposed permit please inform us, in writing, within 15 working days of receipt. MSD will deem absence of a response within this period as acceptance of the draft permit, and we will proceed to issue the final permit.

We appreciate your cooperation and support in helping us to comply with federal regulations. Please contact me at 314.436.8756, if you have any questions.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

SM Rehmer

Scott M. Rehmer, Assistant Engineer

Enclosures: Draft Industrial Wastewater Discharge Permit

cc: Doug Mendoza
Jason Gill

METROPOLITAN ST. LOUIS SEWER DISTRICT
DIVISION OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 2112059600 - 3

EFFECTIVE DATE: June 01, 2010
EXPIRATION DATE: May 31, 2015

ISSUED TO: MALLINCKRODT INC
3600 North Second Street
St. Louis, MO 63147

SIC NUMBER(S): 2816, 2819, 2833, 2834, 2835, 2869

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: 21
SAMPLING PT. REF NUMBER(S): 001, 002, 003, 005, 008, 009, 010, 011, 080, 099, 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 12559, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Scott M. Rehmer
Assistant Engineer

Douglas M. Mendoza, P.E.
Mgr. of Industrial Pretreatment

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 001

SAMPLING POINT LOCATION: MH (Gatewell) at foot of Destrahan 100' E of RR

AVERAGE WASTEWATER FLOW (GPD): 1,000

WASTEWATER SOURCE AND CATEGORY: Sanitary + Storm Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 002

SAMPLING POINT LOCATION: MH 5' S of bldg #96, 30' E of SP 003, (6" pipe from NE, 3' down)

AVERAGE WASTEWATER FLOW (GPD): 2,200

WASTEWATER SOURCE AND CATEGORY: Sanitary

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 003

SAMPLING POINT LOCATION: MH in alley at Salisbury, 12' W, 3' S of NW corner of building 91

AVERAGE WASTEWATER FLOW (GPD): 29,142

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non Categorical Process Waste (Machine shop, painting, parts washing) + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D) + Flow From Upstream Sample Point (From 009)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	****	Instant	Once/3 mo
Temperature [Deg C]	****	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	****	Instant	Once/year
pH [SU]	****	Instant	Once/3 mo
pH [SU]	****	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** No limits; monitoring requirement only for calculation at SP 099.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 005

SAMPLING POINT LOCATION: MH 5' S of building #96, 30' E of SP 003 (Center pipe, 8" dia., 3' down)

AVERAGE WASTEWATER FLOW (GPD): 32,000

WASTEWATER SOURCE AND CATEGORY: Non Contact Cooling Water + Laboratory Waste (R&D waste (including 439 from bldg 96))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 008

SAMPLING POINT LOCATION: Oveflow chamber on N side of pump station on W side of building T

AVERAGE WASTEWATER FLOW (GPD): 0 (maximum flow 1,440,000 gpd)

WASTEWATER SOURCE AND CATEGORY: Emergency Bypass (Pump station bypass to Salisbury trunk)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 009

SAMPLING POINT LOCATION: MH in Mallinckrodt St 27' E of Broadway, 4' from S curb

AVERAGE WASTEWATER FLOW (GPD): 11,000

WASTEWATER SOURCE AND CATEGORY: Flow From Offsite (Offsite W of Broadway, Upstream SP (To 003))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	****	Instant	Once/3 mo
Temperature [Deg C]	****	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	****	Instant	Once/year
pH [SU]	****	Instant	Once/3 mo
pH [SU]	****	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** No limits; monitoring requirement only for calculation at SP 099.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 010

SAMPLING POINT LOCATION: MH w/square lid 50' N of neutralization control building at Hall & Salisbury

AVERAGE WASTEWATER FLOW (GPD): 1,142,913

WASTEWATER SOURCE AND CATEGORY: Boiler Blowdown + Plant & Equipment Washdown + Regeneration/Reject Water + Kitchen Waste + Storm Water + Sanitary + Laboratory Waste + Non Categorical Process Waste + Categorical (SP's 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938) + Non Contact Cooling Water

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Chromium (Total) [mg/L]	5.0	Daily Avg	Once/3 mo
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Zinc (Total) [mg/L]	3.0	Daily Avg	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 011

SAMPLING POINT LOCATION: MH with square lid 18' S from NW corner of bldg 223 under iron ladder

AVERAGE WASTEWATER FLOW (GPD): 0 (maximum flow 14,000 gpd)

WASTEWATER SOURCE AND CATEGORY: Storm Water + Emergency Bypass (Overflow from Plant 5)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 080

SAMPLING POINT LOCATION: Inlet to sump (double MH) N of building #98

AVERAGE WASTEWATER FLOW (GPD): 3,500

WASTEWATER SOURCE AND CATEGORY: Lab Waste + Categorical (439 Sub C PSES (CN-no, NH3 exempt) (CWF-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Diethylamine [mg/L]	255	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year
Triethylamine [mg/L]	100	Monthly Avg	Once/3 mo
Triethylamine [mg/L]	255	Daily Max	Once/3 mo
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 099

SAMPLING POINT LOCATION: No sample point available (Represents WW contributions between upstream SP 009 & downstream SP 003)

AVERAGE WASTEWATER FLOW (GPD): 57,600

WASTEWATER SOURCE AND CATEGORY: Sanitary + Non Categorical Process Waste + Laboratory Waste (439 Sub E NA (No Stds) & non-439 R&D)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Biochemical Oxygen Demand (5 Day)	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand	****	Daily Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
Total Suspended Solids	****	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.844	Instant	Once/year

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 905

SAMPLING POINT LOCATION: MH inside building X, 12' W, 5' S of W door (Total flow out)

AVERAGE WASTEWATER FLOW (GPD): 100,000

WASTEWATER SOURCE AND CATEGORY: Categorical (414 Sub G & H PSES (App A-no))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
(cis & trans) 1,3-Dichloropropene [g/Day]	74	Monthly Avg	Once/3 mo
(cis & trans) 1,3-Dichloropropene [g/Day]	301	Daily Max	Once/3 mo
1,1,1-Trichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1,1-Trichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1,2-Trichloroethane [g/Day]	12	Monthly Avg	Once/3 mo
1,1,2-Trichloroethane [g/Day]	48	Daily Max	Once/3 mo
1,1-Dichloroethane [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethane [g/Day]	22	Daily Max	Once/3 mo
1,1-Dichloroethene [g/Day]	8	Monthly Avg	Once/3 mo
1,1-Dichloroethene [g/Day]	23	Daily Max	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2,4-Trichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichlorobenzene [g/Day]	301	Daily Max	Once/3 mo
1,2-Dichloroethane [g/Day]	68	Monthly Avg	Once/3 mo
1,2-Dichloroethane [g/Day]	217	Daily Max	Once/3 mo
1,2-Dichloropropane [g/Day]	74	Monthly Avg	Once/3 mo
1,2-Dichloropropane [g/Day]	301	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	144	Daily Max	Once/3 mo
1,3-Dichlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
1,4-Dichlorobenzene [g/Day]	54	Daily Max	Once/3 mo
1,4-Dichlorobenzene [g/Day]	144	Monthly Avg	Once/3 mo
2-Nitrophenol [g/Day]	87	Daily Max	Once/3 mo
2-Nitrophenol [g/Day]	25	Monthly Avg	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	105	Daily Max	Once/3 mo
4,6-Dinitro-2-Methylphenol [g/Day]	30	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	61	Monthly Avg	Once/3 mo
4-Nitrophenol [g/Day]	218	Daily Max	Once/3 mo
Acenaphthene [g/Day]	7	Monthly Avg	Once/3 mo
Acenaphthene [g/Day]	18	Daily Max	Once/3 mo
Anthracene [g/Day]	7	Monthly Avg	Once/3 mo
Anthracene [g/Day]	18	Daily Max	Once/3 mo
Benzene [g/Day]	22	Monthly Avg	Once/3 mo
Benzene [g/Day]	51	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	98	Daily Max	Once/3 mo
Bis (2-EthylHexyl) Phthalate [g/Day]	36	Monthly Avg	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Carbon Tetrachloride [g/Day]	144	Daily Max	Once/3 mo
Carbon Tetrachloride [g/Day]	54	Monthly Avg	Once/3 mo
Chlorobenzene [g/Day]	144	Daily Max	Once/3 mo
Chlorobenzene [g/Day]	54	Monthly Avg	Once/3 mo
Chloroethane [g/Day]	112	Daily Max	Once/3 mo
Chloroethane [g/Day]	42	Monthly Avg	Once/3 mo
Chloroform [g/Day]	123	Daily Max	Once/3 mo
Chloroform [g/Day]	42	Monthly Avg	Once/3 mo
Chloromethane [g/Day]	112	Daily Max	Once/3 mo
Chloromethane [g/Day]	42	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	8	Monthly Avg	Once/3 mo
Di-n-butyl Phthalate [g/Day]	16	Daily Max	Once/3 mo
Diethyl Phthalate [g/Day]	17	Monthly Avg	Once/3 mo
Diethyl Phthalate [g/Day]	43	Daily Max	Once/3 mo
Dimethyl Phthalate [g/Day]	7	Monthly Avg	Once/3 mo
Dimethyl Phthalate [g/Day]	18	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	144	Daily Max	Once/3 mo
Ethylbenzene [g/Day]	54	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Fluoranthene [g/Day]	8	Monthly Avg	Once/3 mo
Fluoranthene [g/Day]	20	Daily Max	Once/3 mo
Fluorene [g/Day]	7	Monthly Avg	Once/3 mo
Fluorene [g/Day]	18	Daily Max	Once/3 mo
Hexachlorobenzene [g/Day]	74	Monthly Avg	Once/3 mo
Hexachlorobenzene [g/Day]	301	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	144	Daily Max	Once/3 mo
Hexachlorobutadiene [g/Day]	54	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	74	Monthly Avg	Once/3 mo
Hexachloroethane [g/Day]	301	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	64	Daily Max	Once/3 mo
Methylene Chloride [g/Day]	14	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	7	Monthly Avg	Once/3 mo
Naphthalene [g/Day]	18	Daily Max	Once/3 mo
Nitrobenzene [g/Day]	847	Monthly Avg	Once/3 mo
Nitrobenzene [g/Day]	2423	Daily Max	Once/3 mo
Phenanthrene [g/Day]	18	Daily Max	Once/3 mo
Phenanthrene [g/Day]	7	Monthly Avg	Once/3 mo
Pyrene [g/Day]	8	Monthly Avg	Once/3 mo
Pyrene [g/Day]	18	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	62	Daily Max	Once/3 mo
Tetrachloroethene [g/Day]	20	Monthly Avg	Once/3 mo
Toluene [g/Day]	11	Monthly Avg	Once/3 mo
Toluene [g/Day]	28	Daily Max	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	9	Monthly Avg	Once/3 mo
Trans-1,2-Dichloroethene [g/Day]	25	Daily Max	Once/3 mo
Trichloroethene [g/Day]	10	Monthly Avg	Once/3 mo
Trichloroethene [g/Day]	26	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Vinyl Chloride [g/Day]	65	Daily Max	Once/3 mo
Vinyl Chloride [g/Day]	37	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 912

SAMPLING POINT LOCATION: Valve on discharge line from outdoor Tank #450 on SE corner of Building 504

AVERAGE WASTEWATER FLOW (GPD): 150,000

WASTEWATER SOURCE AND CATEGORY: Non-Categorical Process (ASI process waste from bldgs 504/505)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	Once/month
N,N-Dimethyl Acetamide [LB / DAY]	7,091	Daily Avg	Once/month
N,N-Dimethyl Acetamide [LB / DAY]	5,459	Monthly Avg	Once/month

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 915

SAMPLING POINT LOCATION: Valve on E side of T-315 at inside NE corner of bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.10	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 920

SAMPLING POINT LOCATION: Valve on discharge line, outside SW corner of diked area E of bldg 512

AVERAGE WASTEWATER FLOW (GPD): 13,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no,NH3 exempt) - with SP937)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

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** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 927

SAMPLING POINT LOCATION: Tank 308 (acid press tank) in bldg 6

AVERAGE WASTEWATER FLOW (GPD): 2,700

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 930

SAMPLING POINT LOCATION: Valve on 4" PVC line inside NW corner of Bldg. 222S, only when sump is discharging from tanks 300 and 355

AVERAGE WASTEWATER FLOW (GPD): 650

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 933

SAMPLING POINT LOCATION: Valve on Tank #1 10' NW of SE corner of Bldg. 200W - only when disch. 439 waste

AVERAGE WASTEWATER FLOW (GPD): 100

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub B PSES)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 935

SAMPLING POINT LOCATION: 1/2" steel pipe on inside of concrete wall S of North stairs - Bldg 512

AVERAGE WASTEWATER FLOW (GPD): 26,000

WASTEWATER SOURCE AND CATEGORY: Categorical (Cat. 439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo

Parameter	Limit *	Limit Type **	Sampling Frequency
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 936

SAMPLING POINT LOCATION: Valve on 1/2" line 1' from hydrogenerator bldg 8' from S wall in SE corner of bldg 260

AVERAGE WASTEWATER FLOW (GPD): 16,500

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt))

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
1,2-Dichlorobenzene [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichlorobenzene [mg/L]	8.2	Monthly Avg	Once/3 mo
1,2-Dichloroethane [mg/L]	20.7	Daily Max	Once/3 mo
1,2-Dichloroethane [mg/L]	8.2	Monthly Avg	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	20.7	Daily Max	Once/3 mo
4-Methyl-2-Pentanone [mg/L]	8.2	Monthly Avg	Once/3 mo
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Benzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Benzene [mg/L]	3.0	Daily Max	Once/3 mo
Chlorobenzene [mg/L]	0.7	Monthly Avg	Once/3 mo
Chlorobenzene [mg/L]	3.0	Daily Max	Once/3 mo
Chloroform [mg/L]	0.03	Monthly Avg	Once/3 mo
Chloroform [mg/L]	0.1	Daily Max	Once/3 mo
Diethylamine [mg/L]	100	Monthly Avg	Once/year
Diethylamine [mg/L]	255	Daily Max	Once/year
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isobutyraldehyde [mg/L]	20.7	Daily Max	Once/3 mo
Isobutyraldehyde [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Isopropyl Ether [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Ether [mg/L]	8.2	Monthly Avg	Once/3 mo
Methyl Formate [mg/L]	20.7	Daily Max	Once/3 mo
Methyl Formate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo
Triethylamine [mg/L]	100	Monthly Avg	Once/year
Triethylamine [mg/L]	255	Daily Max	Once/year

Parameter	Limit *	Limit Type **	Sampling Frequency
Xylene [mg/L]	0.7	Monthly Avg	Once/3 mo
Xylene [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Butyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Butyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Heptane [mg/L]	3.0	Daily Max	Once/3 mo
n-Hexane [mg/L]	0.7	Monthly Avg	Once/3 mo
n-Hexane [mg/L]	3.0	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 937

SAMPLING POINT LOCATION: Valve on 2nd level on W side near pipe bridge N of bldg 501

AVERAGE WASTEWATER FLOW (GPD): 23,000

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub C PSES (CN-no, NH3 exempt) - with SP920)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Tetrahydrofuran [mg/L]	3.4	Monthly Avg	Once/3 mo
Tetrahydrofuran [mg/L]	9.2	Daily Max	Once/3 mo
Toluene [mg/L]	0.2	Monthly Avg	Once/3 mo
Toluene [mg/L]	0.3	Daily Max	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

DISCHARGE LIMITATIONS

SAMPLING POINT REFERENCE NUMBER: 938

SAMPLING POINT LOCATION: 6" floor drain in far SW corner of room in Building 5, Room 406

AVERAGE WASTEWATER FLOW (GPD): 71

WASTEWATER SOURCE AND CATEGORY: Categorical (439 Sub D PSNS)

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Acetone [mg/L]	20.7	Daily Max	Once/3 mo
Acetone [mg/L]	8.2	Monthly Avg	Once/3 mo
Ethyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Ethyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Flow [GPD]	***	Daily Avg	***
Isopropyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
Isopropyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	0.7	Monthly Avg	Once/3 mo
Methylene Chloride [mg/L]	3.0	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	20.7	Daily Max	Once/3 mo
n-Amyl Acetate [mg/L]	8.2	Monthly Avg	Once/3 mo

* Limits are based on MSD Ordinance 12559 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.B of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH, temperature, and/or lower explosive limit at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-D of District Ordinance 12559. The permittee shall include, with each self-monitoring report, a summary of the continuous monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, and the total time for all excursions for temperature, pH, and/or lower explosive limit.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied or approved by the District) shall be submitted to the District's Division of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.
b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.
c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 12559. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report under this permit is due by October 28, 2010. For non-quarterly self-monitoring requirements, the permit year commences on July 1.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Division of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Division of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 12559, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 12559.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 12559.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Division of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

3. Slug discharge control: The permittee shall develop and implement procedures to control slug discharges, as required by the District, and shall notify the District immediately of any changes at the permittee's facilities, not already addressed in the permittee's slug control requirements, which may affect the potential for a slug discharge.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Division of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 12559, Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Division of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 12559 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than five (5) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 12559.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 12559.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Division of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Division of Environmental Compliance at (314) 436-8710.

SECTION II- SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. PROHIBITED DISCHARGES

A.1. Categorical Waste Discharge Prohibited

There shall be no discharge to the District of process wastes which are subject to pretreatment standards in 40 CFR 414, except for those wastes conveyed by sampling point 905. The permittee shall certify on each quarterly self-monitoring report that such wastes are not discharged, except as conveyed by sampling point 905.

B. SPECIAL SAMPLING AND ANALYTICAL PROCEDURES

B.1. No Monitoring When Influenced by Storm Runoff

Sampling points 003, 008, 009, 010, 011, and 080 may, at times, convey storm water in addition to wastewater regulated by this permit. The self monitoring required pursuant to Section I.A.1 of this permit, shall be conducted only at times when the discharge of regulated wastewater will not be influenced by storm water runoff.

B.2. Reporting Upstream-Downstream Monitoring Results

No limitations are listed for "upstream" sampling point 009 and "downstream" sampling point 003. The results of monitoring at these two points will be used to determine the permittee's total pollutant contributions from all of permittee's connections between these two points. For reporting purposes those connections are combined and identified, in this permit, as sampling point 099. Permittee shall perform monitoring at both 009 and 003 within the same time period on the same day. Monitoring shall consist of sampling for all listed pollutants and measurements of flow sufficient to accurately determine the average daily flow at each point. Compliance, at 099, for each pollutant having a concentration-based limitation, will be based upon the concentration (CONC) calculated using the following formula:

$$CONC = \frac{(DF \times DC) - (UF \times UC)}{DF - UF}$$

Where: DF = downstream flow rate; UF = upstream flow rate
DC = downstream concentration; UC = upstream concentration

Permittee shall include, on the self-monitoring reports, the pollutant concentrations and flow rates determined at the upstream and downstream points as well as the calculated pollutant concentrations at 099. Permittee shall ensure that the discharge at each connection between the upstream and downstream points maintains, at all times, a pH within the range of 5.5 to 11.5 SU and a temperature no greater than 60 degrees Celsius (centigrade).

B.3. Non-Standard Special Sampling and Analytical Procedures – SP 008 and 011

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

B.4. Non-Standard Special Sampling and Analytical Procedures – SP 912

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

B.5. Non-Standard Special Sampling and Analytical Procedures – SP 938

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

C. SPECIAL CERTIFICATION AND REPORTING REQUIREMENTS

C.1. Sampling Not Required at Non-Toxic / Low-Flow Point

The permittee is not required to sample discharges at sampling points 001 and 002, provided the character of wastes discharged does not differ from that identified in the permit application. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes discharged at those sampling points since the last report.

C.2. 439 Absence Certification & Once per year Sampling

Based on the determination referenced above and on permittee's verification that all pollutants regulated under 40 CFR 439, Subpart B, are absent in the process wastewater discharged from pharmaceutical manufacturing operations at pharmaceutical sampling points 915, 930, 935, and 936, this permit requires sampling for those pollutants only once per year, with the results to be reported on the appropriate quarterly self-monitoring report. In addition, the permittee shall certify on each quarterly self-monitoring report that the determination on file, referenced by date, remains valid.

C.3. 439 Surrogate Recommendation & Certification – SP 920 and 937

Pursuant to the provisions of 40 CFR 439.2(a) the District has accepted the permittee's recommendation to allow monitoring for surrogate pollutants in lieu of certain other pollutants regulated under 40 CFR 439, Subpart C, at pharmaceutical sampling point(s) 920 and 937. The permittee must maintain the documentation for this recommendation in the facility permit records. An updated recommendation shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any pollutant for which monitoring, using a surrogate, has been allowed. In addition, the permittee shall certify on each quarterly self-monitoring report that the recommendation on file, referenced by date, remains valid.

C.4. Sampling Not Required at Unsampled & Partly Sampled Connections

In addition to the sewer connections with sampling points identified herein, the permittee and the District have identified other connection points at which wastewater is discharged from the permittee's premise to the District. These additional connections currently do not have sampling points. It has been determined:

a. Only domestic type wastewater not subject to federal categorical standards or toxic pollutant standards is discharged at these connections, or

b. All wastewater subject to federal categorical standards or toxic pollutant standards is adequately monitored at other permitted sampling points prior to combining with domestic type wastewater for discharge at these connections.

The permittee is not required, at this time, to establish sampling points or to sample discharges at these connections. The permittee shall certify on each quarterly self-monitoring report that there has been no change in the character of the wastes (as described in a or b above) discharged at these connections since the last report. If changes in discharge do occur, they shall be reported pursuant to General Condition I.B.

C.5. No Sampling at Connections Between Up & Down Sample Points

The permittee is not required, at this time, to establish sampling points or to separately sample discharges at the sewer connections located between the upstream and downstream sampling points identified in this permit. However, if it is determined, by the District, that sampling at the identified upstream and downstream points is not adequate to document compliance with discharge limitations, the District may require the installation of a separate sampling point at each connection.

C.6. Certification of No Cyanide Under 439

The permittee has reported that cyanide is not used or generated in any pharmaceutical manufacturing process subject to regulation under 40 CFR 439. Therefore, pursuant to the standards in 40 CFR 439, the permittee is not subject to limitations or monitoring for Total Cyanide at pharmaceutical sampling sampling points 080, 915, 920, 935, 936 and 937. The permittee shall certify on each quarterly self-monitoring report that cyanide is not used or generated.

C.7. Radioactive Discharge Reporting Requirements

Permittee is authorized to discharge not more than the following amount of radioactive material per year to the District's sanitary sewers:

(1) For materials subject to licensing by the Nuclear Regulatory Commission:
5 curies Hydrogen-3
1 curie Carbon-14
1 curie for all other radioactive materials combined

(2) For all other materials:
1 curie for all radioactive materials combined

Excreta from individuals undergoing medical diagnosis or treatment with radiological materials shall be exempt from this prohibition. Any radioactive material discharged to the wastewater system must be readily soluble (or readily dispersible biological material) in water. This authorized level may be modified at any time should the District determine that permittee's discharge of radioactive materials, either alone or in conjunction with other user's discharges of radioactive materials, causes interference as defined in MSD Ordinance 12559.

The permittee shall include with each quarterly self-monitoring report, on forms supplied by the District, a radioactive materials discharge report. The report shall specify the activity discharged to the sewer system by radionuclide during the reporting period. The permittee shall also certify compliance with state and federal regulations for disposal of radioactive material by release into sanitary sewage.

C.8. Reporting of Results Under Mass Discharge Limits – SP 905

The limitations at sampling point 905 are in mass per day units as per 40 CFR 414.111. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass and the flow used to calculate the mass. The flow used in the mass calculation shall be a measured (not estimated) total flow over a 24 hour period which includes the period during which the sample was collected.

In addition, upon notification that the District will be collecting samples at these points, the permittee shall record the total measured flow at each point over a 24 hour period. The 24 hour period, for each point, must include the hours between the start and end times of the MSD sampling. A report of these flow measurements shall be submitted to the District, using a form provided by the District, within fourteen (14) days after the end of the flow measurement period.

C.9. Reporting Continuous pH Monitoring Data – SP 010

The permittee has chosen to employ continuous monitoring techniques for pH at at sampling point 010, as allowed under permit General Condition A.7. Therefore, the permittee shall include with each quarterly self-monitoring report a summary of monitoring data and excursions as required by General Condition A.7.

C.10. Non-Standard Special Certification and Reporting Requirements – SP 930, 933, 936

For sampling points 930, 933, and 936 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, and 936 are adhered to.

C.11 439 Determination of Absence of Regulated Pollutants

The permittee has determined that certain pollutants, regulated under 40 CFR 439, Subpart C, are neither used nor generated in pharmaceutical manufacturing operations at the permitted facility. The permittee must maintain the documentation for this determination in the facility permit records. An updated determination, based on a review of raw materials and an assessment of process chemistry, products and by-products resulting from each manufacturing process, shall be submitted to the District with each application for permit renewal and at any time, during the life of this permit, when changes in raw materials or processes or other factors could result in a change in the status of any of the regulated pollutants.

D. SPECIAL BILLING REPORTING REQUIREMENTS

D.1. Reporting Changes Which Might Impact Return Factor

Pursuant to District Sewer Service Charge Ordinances, the permittee has been granted a reduction in billing for used water which does not enter the District's system. The permittee is currently billed for sewer service charges based on ninety-six (96) percent of the used water (on an annual basis) being discharged to the District. The permittee shall notify the District's Department of Environmental Compliance within ten (10) business days of becoming aware of any changes in operations which will change the percentage of used water discharged to the District.

D.2. Reporting Changes Which Might Impact Surcharge

Pursuant to District Sewer Service Charge Ordinances, the permittee is currently subject to surcharge billing for Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), and/or Total Suspended Solids (TSS). As of July 6, 2009, the permittee's surcharge billing values are: 431 mg/l for BOD, 947 mg/l for COD, and 83 mg/l for TSS. These values will continue to be used until replaced by updated certified data in accordance with the procedures in the ordinance.

E. DERIVATION OF LIMITS

E.1. Ammonia Limits Under 439

Pursuant to the provisions of 40 CFR 439 Subpart C, sources that discharge to a POTW with nitrification capability (defined at 40 CFR 439.1(i)) are not required to achieve the standards for ammonia (as N). Mallinckrodt discharges to the District's Bissell Treatment Plant, which has been shown to have nitrification capability. Should subsequent data show that the District's BissellTreatment Plant no longer has nitrification capability, Mallincrodt will be required to achieve the standards for ammonia (as N).

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PART I: IDENTIFYING INFORMATION

Company Name: **MALLINCKRODT INC.**

Permit No: 2115059600-3 Effective Date: 06-01-2010 Expiration Date: 05-31-2015

Premise Address: 3600 North Second Street, 63147

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ⇨								
DATES ON WHICH SAMPLES WERE COLLECTED ⇨								
TIMES AT WHICH SAMPLES WERE COLLECTED ⇨								
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (G=grab, C=composite, M=measured flow, E=estimated flow)						UNITS
FLOW								

You must complete and sign the certification statements on the second page.

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify the following.
Please review your permit and **PLACE YOUR INITIALS ON THE LINES NEXT TO THE CERTIFICATIONS**.

A	NO CHANGE IN WASTEWATER DISCHARGE AT SAMPLE POINTS WITH NO MONITORING REQUIRED
	For permit special conditions that waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification for each report in which monitoring is waived: _____ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sample points 001 and 002. _____ I certify, since the last discharge monitoring report, there has been no discharge from sample points 008 and 011.
B	NO CHANGE IN WASTEWATER DISCHARGE AT ACTIVE CONNECTIONS WITHOUT SAMPLE POINTS
	For permit special conditions that waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit.
E	NO DISCHARGE OF CATEGORICAL WASTE
	For permit special conditions that prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification: _____ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR 414 (except for those wastes conveyed by SP 905).
F	CYANIDE NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample points 080, 915, 920, 935, 936, and 937, subject to the following certification: _____ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.
H	PHARMACEUTICAL POLLUTANTS NOT USED OR GENERATED IN 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants at the Pharmaceutical sample points 915, 935, and 936, subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, have not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439. In addition, the above-referenced report remains valid.
I	SURROGATE MONITORING ALLOWED FOR 40 CFR 439 OPERATIONS
	Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from monitoring for certain 40 CFR 439-regulated pollutants, and replaced by monitoring for surrogate pollutant(s), at the Pharmaceutical sample points 920 and 937 subject to the following certification: _____ I certify, since the last discharge monitoring report, the 40 CFR 439-regulated pollutants, as determined in permittee's report dated April 5, 2010, continue to receive the same degree of treatment as the surrogate pollutant(s). In addition, the above-referenced report remains valid.

PART IV: GENERAL CERTIFICATION STATEMENTS

B	DISCHARGE MONITORING REPORT CERTIFICATION
	All permittees must sign and complete the information below: I certify under penalty of Law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Print or type name of signing official: _____ Title: _____ Telephone: _____ Signature: _____ Date: _____

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

MSD

PERMIT FACT SHEET

Check one:
FIRST TIME PERMIT ☐ Prepared by: S. Rehmer Date: 3/9/2010
RENEWAL ☒ Reviewed by: SMM Date: 4-21-10

PERMIT NO: 2112059600-3 EFFECTIVE DATE: 6/1/2010 EXPIRATION DATE: 5/31/2015

COMPANY NAME: MALLINCKRODT INC.

PREMISE ADDRESS: 3600 N Second Street, 63147

RELATED ACCOUNT NUMBERS: none

SIC NUMBERS: 2816, 2819, 2833, 2834, 2835, 2869

TYPE OF OPERATION: Mfg of pharmaceuticals

TOTAL NUMBER OF SAMPLING POINTS: 21 or NO SAMPLING POINT ☐

NUMBER OF: ORDINANCE 10 CATEGORICAL 10 COMBINED 1

CATEGORICAL INDUSTRY? YES ☒ NO ☐

If Yes, 40 CFR 414 Subpart G, H PSES ☒ PSNS ☐

40 CFR 439 Subpart B(ES), C(ES), D(NS) PSES ☒ PSNS ☒

EXTRA STRENGTH SURCHARGE? YES ☒ NO ☐ If Yes, BOD 431 COD 947 TSS 83

RETURN FACTOR? YES ☒ NO ☐ If Yes, Acct #(s) 00118821 RF 0.96

SPECIAL CONDITIONS REQUIRED? YES ☒ NO ☐

All SMR start dates begin at start of calendar quarter: ☐ same as/containing permit effective date
☒ following permit effective date

SMR General Cert. B attached to first permit SP (001) at reporting frequency of once/3mo? Y ☒ N ☐

SUPPORTING DOCUMENTS ATTACHED	YES	NO	N/A
Pollutant & Limitations Documentation Sheets:	☒	☐	
Permit Preparation Checklist:	☒	☐	
"Special Certs & Gen Rpts for Spec Conditions not tied to Specific SPs" Sheet:	☒	☐	
Production Based Standards Calculation Sheets: If Yes, for Sampling Points: _____	☐	☐	☒
Most Strict Standards Calculation Sheets: If Yes, for Sampling Points: _____	☐	☐	☒
Combined Wastestream Calculations Sheets: If Yes, for Sampling Points: _____	☐	☐	☒

Other: Special cond non-std special sampling, analytical, cert, & reporting req's; 414 limit calc's at 905; doc for Ammonia Exempt; letter 4-5-2010 re. IUQ updates, DMAc freq. reduction req, and 439 cert's.

COMMENTS (Include notations of any significant changes from last permit):
Changes since the last revision, July 1, 2008, are: Deletion of SP 918 & 932; SP 912 sampling frequency reduced from weekly to monthly.

REV 9/2009

PERMIT NO: 2112059600-3

SPECIAL CONDITIONS NOT TIED TO SPECIFIC SAMPLE POINTS

Special Condition:	# E.5	# E.9 + 22	# E.18	# F.1 + 2	# ___	# B.1	# D.11	# C.6
List any related SMR certifications:	# B	# N/A	# N/A	# N/A	# ___	# E	# N/A	# N/A
SMR certification frequency:	once 3 mo	[none]	[none]	[none]	[none]	once 3 mo	[none]	[none]
List any related General Reports:	# _____	# _____	# RAD	# _____	# _____	# _____	# _____	# _____
General Report frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]

Are all the SMR certifications listed above associated with first permit sample point (001)? YES ☒ NO ☐

Check here if there are no non-SP-specific Special Conditions: ☐

MSD 015945

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 001 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary, storm

Flow Rate: 1,000 Units: GPD Basis for Flow Rate: IUQ No sampled pollutants; removed from previous permits.

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015946

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 002 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary

Flow Rate: 2,200 Units: GPD Basis for Flow Rate: IUQ No sampled pollutants; removed from previous permits.

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.3	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

REV 9/2009

MSD 015947

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 003 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Sanitary, flow from 009, Lab waste, Non-cat process

Flow Rate: 29,142 Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	No limits	once 3 mo	Standard + high volume	
pH	Standard	No limits	once 3 mo	Standard + high volume	
Temp	Standard	No limits	once 3 mo	Standard + high volume	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015948

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 005 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Lab waste, NCCW

Flow Rate: 32,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	12559	once 3 mo	Standard + high volume	
pH	Standard	12559	once 3 mo	Standard + high volume	
Temp	Standard	12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015949

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 008 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass, Storm

Flow Rate: 0 Avg; 1.44 M max. Units: GPD Basis for Flow Rate: IUQ

Pollutants	Basis for inclusion (or exclusion of std polls)	Basis for limitation (Ord 12559, CFR___, etc)	Monitoring frequency	Basis for monitoring freq. (std for vol, etc; innocuous, low flow, etc)	Any OK?
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	12559	once 3 mo	Standard	
pH	Standard	12559	once 3 mo	Standard	
Temp	Standard	12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# N/A	# N/A	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015950

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 009 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Flow from offsite (W of Broadway)

Flow Rate: 11,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	No limits	once 3 mo	Standard	
BOD	Standard	No limits	once 3 mo	Standard + high volume	☐
COD	Standard	No limits	once 3 mo	Standard + high volume	☐
O&G	Standard	No limits	once 3 mo	Standard + high volume	
pH	Standard	No limits	once 3 mo	Standard + high volume	
Temp	Standard	No limits	once 3 mo	Standard + high volume	
TSS	Standard	No limits	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	No limits	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.11	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015951

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 010 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Cat from 905, 912, 915, 920, 927, 930, 933, 935, 936, 937, 938; NCCW; Lab waste; Non-cat process; Boiler blow-down; Kitchen waste; P&E wash; Regen/Reject; Sanitary; Storm

Flow Rate: 1,142,913 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	12559	once 3 mo	Standard + high volume	
pH	Standard	12559	once 3 mo	Standard + high volume	
Temp	Standard	12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Cr (t)	KP & data shows present in WW	12559	once 3 mo	Volume + discharge components	☐
Cu (t)	KP & data shows present in WW	12559	once 3 mo	Volume + discharge components	☐
Ni (t)	KP & data shows present in WW	12559	once 3 mo	Volume + discharge components	☐
Zn (t)	KP & data shows present in WW	12559	once 3 mo	Volume + discharge components	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# E.29	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# cont pH	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

REV 9/2009

MSD 015952

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 011 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Emergency bypass; Storm

Flow Rate: 0 Avg; 14k max Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard	☐
COD	Standard	n/a	once 3 mo	Standard	☐
O&G	Standard	12559	once 3 mo	Standard	
pH	Standard	12559	once 3 mo	Standard	
Temp	Standard	12559	once 3 mo	Standard	
TSS	Standard	n/a	once 3 mo	Standard	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# D.12	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# N/A	# N/A	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015953

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 080 **TYPE:** Ord ☐ Cat ☐ Comb ☒

Wastewater Components: Cat (439 C); Lab Waste

Flow Rate: 3,500 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt; CWF-no

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + high volume	☐
COD	Standard	n/a	once 3 mo	Standard + high volume	☐
O&G	Standard	12559	once 3 mo	Standard + high volume	
pH	Standard	12559	once 3 mo	Standard + high volume	
Temp	Standard	12559	once 3 mo	Standard + high volume	
TSS	Standard	n/a	once 3 mo	Standard + high volume	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutical long	Categorical	439-C-PSES	once 3 mo	Categorical + volume	☐
list of 24 (minus 2)			[none]		☐
(no CN or NH3)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.10	# ___	# E.15	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# N/A	# _	# F	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015954

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 099 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Lab waste (439 E & non-439); Non-cat process; Sanitary.

Flow Rate: 57,600 Units: GPD Basis for Flow Rate: IUQ No SP; rep WW between 009 (up) and 003 (down).

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD	Standard	n/a	once 3 mo	Standard + volume	☐
COD	Standard	n/a	once 3 mo	Standard + volume	☐
O&G	Standard	12559	once 3 mo	Standard + volume	
pH	Excluded for up/downstream	No limits	[none]	None	
Temp	Excluded for up/downstream	No limits	[none]	None	
TSS	Standard	n/a	once 3 mo	Standard + volume	☐
Ord. TTO	Standard	12559	once/year	Standard	
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.11	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none].

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: ____

MSD 015955

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 905 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (414 Sub G & H)

Flow Rate: 100,000 Units: GPD Basis for Flow Rate: IUQ App A-no

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
OCPSF list of	Categorical	414 G+H PSES	once 3 mo	Categorical + volume	☐
Pollutants (42)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# E.19	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# N/A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015956

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 912 **TYPE:** Ord ☒ Cat ☐ Comb ☐

Wastewater Components: Non-cat process

Flow Rate: 150,000 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once/mo	Required for mass limit calc's	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
DMAC	Nature of production	MSD derived	Once / month	Production based	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# D.12	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# N/A	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☒ NO ☐ Explain: Reduced sampling frequency from once per week to once per month.

MSD 015957

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 915 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C)

Flow Rate: 2,700 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutical long	Categorical	439-C-PSES	once 3 mo	Categorical + volume	☐
list of 24 (minus 2)	No CN or NH3 needed		[none]		☐
Diethylamine, Triethylamine	Categorical	439-C-PSES	once/year	Not in process WW, at or < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# ___	# E.23	# E.15	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# H	# F	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015958

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 920 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C)

Flow Rate: 13,000 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt; with 937

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical WW	439-C-PSES	once 3 mo	Cat + volume	☐
Toluene	Categorical WW	439-C-PSES	once 3 mo	KP + cat + volume	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# E.24	# E.15	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# __	# I	# F	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015959

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 927 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B)

Flow Rate: 2,700 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutica list (5)	Categorical	439-B-PSES	once 3 mo	Categorical + nature of WW	☐
(Acetone,			[none]		☐
Ethyl Acetate,			[none]		☐
Isopropyl Acetate,			[none]		☐
Methylene Chloride,			[none]		☐
n-Amyl Acetate)			[none]		☐
			[none]		☐

Special Condition:	# __	# ____	# ____	# ____	# ____	# ____	# ____	# ____
List related SMR certs:	# __	# ____	# ____	# ____	# ____	# ____	# ____	# ____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# ____	# ____	# ____	# ____	# ____	# ____	# ____	# ____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015960

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 930 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B)

Flow Rate: 650 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutica list (5)	Categorical	439-B-PSES	once 3 mo	Categorical + nature of WW	☐
(Acetone,			[none]		☐
Ethyl Acetate,			[none]		☐
Isopropyl Acetate,			[none]		☐
Methylene Chloride,			[none]		☐
n-Amyl Acetate)			[none]		☐
			[none]		☐

Special Condition:	# __	# __	# E.21	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# __	# N/A	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015961

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 933 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub B)

Flow Rate: 100 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutica list (5)	Categorical	439-B-PSES	once 3 mo	Categorical + nature of WW	☐
(Acetone,			[none]		☐
Ethyl Acetate,			[none]		☐
Isopropyl Acetate,			[none]		☐
Methylene Chloride,			[none]		☐
n-Amyl Acetate)			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# E.21	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# N/A	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015962

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 935 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C)

Flow Rate: 26,000 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutical long	Categorical	439-C-PSES	once 3 mo	Categorical + volume	☐
list of 24 (minus 2)	(No CN or NH3)		[none]		☐
Diethylamine, Triethylamine	Categorical	439-C-PSES	once/year	Not in process WW, at or < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# E.23	# E.15	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# H	# F	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

MSD 015963

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 936 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C)

Flow Rate: 16,500 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutical long	Categorical	439-C-PSES	once 3 mo	Categorical + volume	☐
list of 24 (less 2)	(No CN or NH3)		[none]		☐
Diethylamine, Triethylamine	Categorical	439-C-PSES	once/year	Not in process WW, at or < DL	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# E.23	# E.15	# E.21	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# H	# F	# N/A	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐, NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015964

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 937 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub C)

Flow Rate: 23,000 Units: GPD Basis for Flow Rate: IUQ CN-no; NH3 exempt; with 920

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Tetrahydrofuran	Categorical WW	439-C-PSES	once 3 mo	Cat + volume	☐
Toluene	Categorical WW	439-C-PSES	once 3 mo	KP + cat + volume	☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# E.24	# E.15	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# I	# F	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	once 3 mo	once 3 mo	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015965

PERMIT NO: 2112059600-3

SAMPLING POINT REFERENCE NUMBER: 938 **TYPE:** Ord ☐ Cat ☒ Comb ☐

Wastewater Components: Cat (439 Sub D)

Flow Rate: 71 Units: GPD Basis for Flow Rate: IUQ

Pollutants	**Basis for inclusion (or exclusion of std polls)**	**Basis for limitation** (Ord 12559, CFR___, etc)	**Monitoring frequency**	**Basis for monitoring freq.** (std for vol, etc; innocuous, low flow, etc)	**Any OK?**
GENERAL:					
FLOW	Standard	n/a	once 3 mo	Standard	
BOD			[none]		☐
COD			[none]		☐
O&G			[none]		
pH			[none]		
Temp			[none]		
TSS			[none]		☐
Ord. TTO			[none]		
			[none]		☐
			[none]		☐
PRIORITY/CATEGORICAL:					
Pharmaceutica list (5)	Categorical	439-D-PSES	once 3 mo	Categorical + nature of WW	☐
(Acetone,			[none]		☐
Ethyl Acetate,			[none]		☐
Isopropyl Acetate,			[none]		☐
Methylene Chloride,			[none]		☐
n-Amyl Acetate)			[none]		☐
			[none]		☐
			[none]		☐

Special Condition:	# __	# D.12	# _____	# _____	# _____	# _____	# _____	# _____
List related SMR certs:	# _	# N/A	# _____	# _____	# _____	# _____	# _____	# _____
SMR cert frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]
List related General Rpts:	# _____	# _____	# _____	# _____	# _____	# _____	# _____	# _____
General Rpt frequency:	[none]	[none]	[none]	[none]	[none]	[none]	[none]	[none]

Is this an Ord or Comb SP w/mon for Ord TTO and that has no TOs on site? YES ☐ NO ☒ If Yes, is SMR Gen Cert. A attached at once/3 mo freq.? YES ☐

Any significant changes? YES ☐ NO ☒ Explain: _____

REV 9/2009

MSD 015966

PERMIT PREPARATION CHECKLIST - PART
(Fact Sheet Attachment)

Company Name: MALLINCKRODT INC. Permit No.: 2112059600-3

Effective Date: 6/1/2010 Prepared by: S. Rehmer Date: 3/10/2010

REVIEW THE PRETREATMENT DATABASE (PIMS), INDUSTRY FILE AND PERMIT APPLICATION. ANSWER THESE QUESTIONS & UPDATE THE DATABASE PRIOR TO DEVELOPING THE DRAFT PERMIT.

1. Are the correct SICs listed? Yes ☒ No ☐
   If no, add _____ delete: _____

2. Is user in surcharge? Yes ☒ No ☐
   If yes, date last certified: 7/6/2009
   If yes, Special Condition F.2 applies.

3. Does user's premise have more than one MSD account? Yes ☐ No ☒
   If yes, were all account numbers correctly listed (including occupant #s)? Yes ☐ No ☐
   If no, have account numbers been corrected in database before proceeding? Yes ☐ No ☐

4. Does user have a Return Factor (RF) other than 1.00 for any account? Yes ☒ No ☐
   If yes, list acct no., RF and date last updated:
   Acct 00118821 RF 0.96 Updated 1/28/2002
   Acct _____ RF _____ Updated _____
   If yes, Special Condition F.1 applies.

5. Does user discharge water from a source not included in the MSD Billing system? Yes ☐ No ☒
   If yes, Special Condition F.3 & General Report "Discharge Volume for Billing" apply.

6. Have you established agreement among permit application, water consumption records and PIMS on component flows at each SP, total SP flows and total premise flow? Yes ☒ No ☐
   If no, explain _____

7. Has user been granted any variances from ordinance limitations? Yes ☐ No ☒
   If yes Parameter(s) _____ at SP(s) _____
   If yes, Special Condition C.4 applies.

8. Does user discharge any radioactive materials? Yes ☒ No ☐
   If yes, Special Condition E.18 & General Report "Radiation Discharge" apply.

9. Do all of the user's active connections, to MSD sewers, have identified SPs? Yes ☐ No ☒
   If no, explain: unknown number of connections
   If no, is documentation sufficient to use Spec Cond ☒ E.5, ☐ E.6, ☐ E.7 or ☐ E.8? Yes ☒ No ☐
   If no, is compliance schedule necessary to obtain documentation? Yes ☐ No ☐
   If yes, Special Condition G.1 is necessary.

10. Does premise require use of "upstream/downstream" sampling? Yes ☒ No ☐
    If yes, Upstream SP # 009 & Downstream SP # 003
    If yes, Special Conditions D.11 and E.9 apply.

11. Are there any inactive connections to MSD sewers? Yes ☐ No ☒
    If yes, does Special Condition E10. apply? Yes ☐ No ☐

12. Have you verified, in PIMS, the SP location descriptions are complete and adequate? Yes ☒ No ☐

13. Have you verified, in PIMS, the discharge components, process descriptions and related flows at all SPs, are complete and adequate? Yes ☒ No ☐

14. Are any SPs Dry Justified? Yes ☐ No ☒
    If yes, list points and note on P&LD sheets.
    If yes, Special Condition E.3 applies.

15. Do any SPs convey stormwater in addition to regulated wastewater? Yes ☒ No ☐
    If yes, list points: 003,008,009,010,011,080 and note on P&LD sheets.
    If yes, Special Condition D.10 applies.

16. Does user have any discharges subject to NPDES permitting regulations? Yes ☐ No ☒
    If yes, list MSD points & corresponding NPDES points: _____
    If yes, Special Condition E.14 applies.

17. Are there some SPs where user discharges only non-process wastewater? Yes ☒ No ☐
    If yes, does Special Condition E.3 apply? Yes ☒ No ☐
    If yes, list points 001, 002 and note on P&LD sheets.

18. Is documentation adequate to allow use of grab samples in lieu of composites at any SPs? Yes ☐ No ☒
    If yes, list points _____ and note on P&LD sheets.
    If yes, Special Condition D.1 applies.

19. Are there SPs with less than a quarterly self-monitoring frequency for all parameters? Yes ☐ No ☒
If yes, list points _____ and note on P&LD sheets.
If yes, Special Condition E.4 applies.

20. Can local limits TTO be removed from monitoring at any ordinance SPs? Yes ☐ No ☒
If yes, list points _____ and explain on P&LD sheets.
If yes, does TTO also need to be removed from MSD's monitoring? Yes ☐ No ☐
If yes, discuss with inspector (name: _____) and explain why it had been monitored by MSD: _____

21. Does user have a history of compliance problems at this or a previous location? Yes ☐ No ☒
If yes, is a compliance schedule required? Yes ☐ No ☐
If yes, Special Condition G.1 applies.
Is supporting documentation attached? Yes ☐ No ☐

22. Is user required to monitor for Total Phenols at an ordinance SP? Yes ☐ No ☒
If yes, does Special Condition D.3 apply? Yes ☐ No ☐

23. Has user chosen to employ continuous monitoring techniques for:
pH? If yes, list points 010 . SC E.29 & Gen Rpt "Cont-Mon pH Excursions" apply. Yes ☒ No ☒
Temp? If yes, list points _____. SC E.30 & Gen Rpt "Cont-Mon Temp Excursions" apply. Yes ☐ No ☒
LEL? If yes, list points _____. SC E.31 & Gen Rpt "Cont-Mon LEL Excursions" apply. Yes ☐ No ☒

24. Does the company perform any processes for which summaries of activities are needed? Yes ☐ No ☒
If yes, Special Condition E.33 & General Report "Process Activity Summary" apply.

25. Are special billing conditions, other than the standard Special Conditions, needed? Yes ☐ No ☒
If yes, describe: _____
Does General Report "Discharge Volume for Billing" apply? Yes ☐ No ☐
Does General Report "Custom Non-Standard" apply? Yes ☐ No ☐

26. Are any Special Conditions, other than the standard special conditions, required? Yes ☒ No ☐
If yes, explain: see supporting memo for **FOUR** customized SC's.
Is supporting documentation attached? Yes ☒ No ☐
Does General Report "Custom Non-Standard" apply? Yes ☐ No ☒

27. Is user a hauled waste industry, discharging its wastewater at the Hauled Waste Station? Yes ☐ No ☒
If yes, have permit title, cover page language, & general conditions been modified? Yes ☐ No ☐
If yes, Special Conditions B.9, D.13, H.1, and H.2 apply.

28. Is user classified as a Categorical Industrial User (CIU)? Yes ☒ No ☐
If yes, complete part 2 of checklist. If no, STOP here.

List all the Special Conditions from Part 1 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
RAD	E.18	n/a
	E.5	n/a
	D.11	003, 009, 099
	E.9	003, 009, 099
	D.10	003, 008, 009, 010, 011, 080
	E.3	001, 002
	D.12b	008, 011
	D.12c	912
	D.12d	938
	E.21	930, 933, 936
	F.1	n/a
	F.2	n/a
Cont-Mon pH	E.29	010

SUPPORTING MEMORANDUM

FROM : Scott Rehmer DATE : 03-10-2010

TO : PERMIT PREP CHECKLIST

RE : **MALLINCKRODT INC.** PERMIT : **2112059600-3**

EFFECTIVE DATE : **06-01-2010**

The following are FOUR (4) modified special conditions added to the above permit.

D.12 (special, B.3) Non-Standard Special Sampling and Analytical Procedures

The permittee shall monitor sampling points 008 and 011 for flow and pH on a daily basis during discharges with durations greater than ninety (90) minutes. The other parameters listed for this sampling point shall be analyzed once during each discharge occurrence greater than ninety (90) minutes except for Total Toxic Organics which shall be analyzed only once per year. For all pollutants, grab samples may be collected in lieu of the composite samples specified in General Condition I.A.3. The permittee shall report all analytical results on the quarterly self-monitoring reports. If there has been no discharge at this sampling point during the reporting quarter, then the permittee shall certify, on the self-monitoring report, that there has been no discharge.

D.12 (special, B.4) Non-Standard Special Sampling and Analytical Procedures

Discharges at sampling point 912 shall be metered and controlled to ensure a uniform rate of discharge throughout each 24 hour period. The limitations at this point are in mass units. For each pollutant, the permittee shall include, on the quarterly self-monitoring report, the analytical concentration value determined, the calculated mass, and the measured flow used to calculate the mass.

D.12 (special, B.5) Non-Standard Special Sampling and Analytical Procedures

Since the operation at Sample Point 938 is in a clean room environment, and personal protective equipment must be worn, the MSD samplers must be able to directly view, from outside the process area window, the Mallinckrodt samplers during the time of sample collection.

E.21 (special, C.10) Non-Standard Special Cert and Reporting Requirements

For sampling points 930, 933, and 936 permittee shall ensure that required monitoring is performed only when process wastewater subject to 40 CFR 439 is being discharged. If no discharge occurs within a reporting period, the submitted self-monitoring report shall state "no discharge occurred". Additionally, permittee shall ensure that associated Standard Operating Procedures (SOPs) developed for sampling points 930, 933, and 936 are adhered to.

MSD 015969

PERMIT PREPARATION CHECKLIST - PART 2
(Fact Sheet Attachment)

29. Do any SPs have both Ordinance & Categorical limits? Yes ☒ No ☐
If yes, which sampling point(s): 080; C.3 n/a; no overlapping pollutants.
If yes, Special Condition C.3 is applicable. Is worksheet attached? Yes ☐ No ☒

30. Is the Combined Wastestream Formula (CWF) required? Yes ☐ No ☒
If yes which SP(s): _____
If yes date last calculated: _____
If yes, Special Condition C.2 is applicable. Is CWF worksheet attached? Yes ☐ No ☐

31. Are categorical limitations based on production rates? Yes ☐ No ☒
If yes which SP(s): _____ Date last calculated: _____
If yes does Special Condition C.1 ☐ E1 ☐ or E2 ☐ apply?
If yes, General Report "Production Rates"applies.

32. Are categorical limitations mass limits? Yes ☒ No ☐
If yes, which SP(s): 905
If yes, Special Condition E.19 is applicable.

33. Does user perform categorical operations without a wastewater discharge? Yes ☒ No ☐
If yes which categorical operations are performed: B.1 modified for 905 exception
If yes does Special Condition B.1 ☒ B.2 ☐ or B.3 ☐ apply? Yes ☒ No ☐

34. Are there process discharges, from a categorical operation, for which standards have not been promulgated? Yes ☐ No ☒
If yes for which existing source categorical standard: _____
If yes which SP(s): _____
If yes, is Special Condition E.20 applicable? Yes ☐ No ☐

35. Is user a job shop electroplater with >10,000 gpd subject to 40 CFR 413? Yes ☐ No ☒
If yes, Special Condition D.2 is applicable.

36. Is user a new source soap and detergent manufacturer subject to 40 CFR 417? Yes ☐ No ☒
If yes, is user subject to Subparts O ☐, P ☐, Q ☐ or R ☐? Yes ☐ No ☐
If yes, for Subpart O, Special Condition B.4 is applicable.
If yes, for Subpart P, Special Condition B.5 is applicable.
If yes, for Subpart Q, Special Condition B.6 is applicable.
If yes, for Subpart R, Special Condition B.7 is applicable.

37. Is user a leather tanner/finisher subject to 40 CFR 425? Yes ☐ No ☒
If yes, is user subject to subpart C (Appendix B)? Yes ☐ No ☐
If yes, Special Condition D.7 is applicable.
If no, Special Condition D.6 is applicable.

38. Is user a pulp, paper, and paperboard company subject to 40 CFR 430? Yes ☐ No ☒
If yes, is user subject to a subpart allowing certification for absence of biocides? Yes ☐ No ☐
If yes, for which subpart: _____
If yes, has user certified to the absence of biocides? Yes ☐ No ☐
If yes, Special Condition E.32 is applicable.

39. Is user a Centralized Waste Treater subject to 40 CFR 437? Yes ☐ No ☒
If yes, does it performs operations subject to Subpart(s) A ☐, B ☐ or C ☐? Yes ☐ No ☐
If subject to multiple Subparts, has user requested and been approved for application of Subpart D standards? Yes ☐ No ☐
If yes, Special Conditions E.25 and E.26 are applicable.
If no, have separate sample points been established for each Subpart? Yes ☐ No ☐
If subject to 40 CFR 437, does user receive any waste that contains cyanide at a concentration greater than 136 mg/l? Yes ☐ No ☐
If yes, does user have a separate cyanide sample point after treatment and prior to dilution with other streams? Yes ☐ No ☐
If no, modified Special Condition C.3 for cyanide limit is applicable.
Is CWF worksheet attached? Yes ☐ No ☐
If subject to 40 CFR 437, SC E.33 & General Rpt "Process Activity Summary" apply.
If subject to 40 CFR 437, SC F.4 & General Rpt "Discharge Volume for Billing" apply.

MSD 015970

40. Is user a pharmaceutical manufacturer subject to 40 CFR 439? Yes ☒ No ☐
If yes, has user certified to the absence of other specific regulated pollutants? Yes ☒ No ☐
If yes, Special Conditions E.22 and E.23 are applicable.
List absent pollutants: Diethlyamine & Triethlyamine (once/year)
Date of certification: April 5, 2010
If yes, has user requested, and been approved for, the use of surrogate pollutants for monitoring? Yes ☒ No ☐
If yes, Special Condition E.24 is applicable.
If yes, is user subject to Subpart A or C? Yes ☒ No ☐
If yes, has user certified to the absence of cyanide? Yes ☒ No ☐
If yes, Special Condition E.15 is applicable.
If no, must total cyanide limitations be adjusted? Yes ☐ No ☐
If yes, calculate adjusted limitations. Is worksheet attached? Yes ☐ No ☐

41. Is user a pesticide formulator/packager/repackager subject to 40 CFR 455? Yes ☐ No ☒
If yes, has user requested and been approved for the pollution prevention allowable discharge option? Yes ☐ No ☐
If yes, Special Conditions E.27 and E.28 are applicable.

42. Is user a metal molder/caster subject to 40 CFR 464? Yes ☐ No ☒
If yes, Special Condition D.4 is applicable.
If no, Special Condition B.11 is applicable.

43. Is user a coil coater subject to 40 CFR 465? Yes ☐ No ☒
If yes, is user subject to 40 CFR 465 Subpart(s) A ☐, B ☐ or C ☐? Yes ☐ No ☐
If yes, Special Condition E.16 is applicable.
If yes, is user subject to 40 CFR 465 Subpart D? Yes ☐ No ☐
If yes, Special Conditions D.5, D.9 and E.17 are applicable.
If yes, is there a separate categorical SP for the regulated waste? Yes ☐ No ☐
If yes, include O&G (Hydrocarbon) in the list of parameters at the categorical SP.
If no, and categorical waste discharges at a combined ord/cat SP point, include O&G (Total) and O&G (Hydrocarbon) in the list of parameters at the combined SP.

44. Can user certify, in lieu of monitoring, for categorical TTO at a categorical or combined SP? Yes ☐ No ☒
If yes which SP(s): _____
If yes Special Condition E.11 ☐ or E.12 ☐ is applicable.

45. Do any sampling points have both Ordinance & Categorical TTO limits? Yes ☐ No ☒
If yes, which SP(s): _____
Is Special Condition E.13 applicable? Yes ☐ No ☐
If yes, explain: _____.

46. May user monitor for Oil & Grease, in lieu of TTO, at a categorical SP? Yes ☐ No ☒
If yes, which SP(s): _____
If yes, Special Condition D.8 is applicable.
If yes, is a modification of Special Condition E.13 applicable? Yes ☐ No ☐

List all the Special Conditions from Part 2 that are applicable to this permit.
List those that are specific to a sampling point on that sampling point's fact sheet, too.
List those that are not specific to a sampling point on the "Special Conditions Not Tied to Specific SPs" fact sheet, too.

General Report	Special Condition #	Sampling Point #
	E.19	905
	B.1	905
	E.22	915, 935, 936
	E.23	915, 935, 936
	E.24	920, 937
	E.15	080, 915, 920, 935, 936, 937

Mallinckrodt, 3600 N 2nd St, 63[illegible]7, Facility ID = 2112059600-3; SP[illegible]05, 04-19-2010

414.111 Org. Chem, Plastics, Synthetic Fibers Effluent characteristics	PSES and PSNS			SP-905				
	DM (ug/L)	MA (ug/L)	SP-905	DM (g/Day)	MA (g/Day)		DM (g/Day)	MA (g/Day)
1,1,1-Trichloroethane	59	22	100000	22	8			
1,1,2-Trichloroethane	127	32	GPD	48	12	GPD		
1,1-Dichloroethane	59	22		22	8			
1,1-Dichloroethylene	60	22		23	8			
1,2,4-Trichlorobenzene	794	196		301	74			
1,2-Dichlorobenzene	794	196		301	74			
1,2-Dichloroethane	574	180		217	68			
1,2-Dichloropropane	794	196		301	74			
1,2-trans-Dichloroethylene (trans...)	66	25		25	9			
1,3-Dichlorobenzene	380	142		144	54			
1,3-Dichloropropylene (cis&trans...)	794	196		301	74			
1,4-Dichlorobenzene	380	142		144	54			
2-Nitrophenol	231	65		87	25			
4,6-Dinitro-(o-cresol) (...2-MePh)	277	78		105	30			
4-Nitrophenol	576	162		218	61			
Acenaphthene	47	19		18	7			
Anthracene	47	19		18	7			
Benzene	134	57		51	22			
Bis(2-ethylhexyl) phthalate	258	95		98	36			
Carbon Tetrachloride	380	142		144	54			
Chlorobenzene	380	142		144	54			
Chloroethane	295	110		112	42			
Chloroform	325	111		123	42			
Diethyl phthalate	113	46		43	17			
Dimethyl phthalate	47	19		18	7			
Di-n-butyl phthalate	43	20		16	8			
Ethylbenzene	380	142		144	54			
Fluoranthene	54	22		20	8			
Fluorene	47	19		18	7			
Hexachlorobenzene	794	196		301	74			
Hexachlorobutadiene	380	142		144	54			
Hexachloroethane	794	196		301	74			
Methyl Chloride (ChloroMethane)	295	110		112	42			
Methylene Chloride	170	36		64	14			
Naphthalene	47	19		18	7			
Nitrobenzene	6,402	2,237		2423	847			
Phenanthrene	47	19		18	7			
Pyrene	48	20		18	8			
Tetrachloroethylene	164	52		62	20			
Toluene	74	28		28	11			
Total Cyanide	1,200	420		454	159			
Total Lead	690	320		261	121			
Total Zinc	2,610	1,050		988	397			
Trichloroethylene	69	26		26	10			
Vinyl Chloride	172	97		65	37			

DM = Daily Max MA = Monthly Average

From: Doug Mendoza
To: Fabian Grabski
Date: 5/16/2006 9:47:09 AM
Subject: MALLINCKRODT INC [2112059600] & Nitrification at Bissell Point

Fabian,

Got the results from the lab, and nitrification has been verified to occur in the trickling filters. So the shutdown of the activated sludge will not impact Mallinckrodt. The 40 CFR 439 ammonia limit will still be "not applicable" because we have nitrification at their receiving treatment plant.

Samples were taken on 5/9/06 and analyzed as follows:

Primary effluent: BOD = 67 mg/l, CBOD = 70 mg/l
Trickling filter effluent: BOD = 30 mg/l , CBOD = 22 mg/l (27% less than BOD)

Primary effluent: Kjeldahl nitrogen (TKN) = 22.96 mg/l, Nitrate-Nitrite = 0.68 mg/l
Trickling filter effluent: Kjeldahl nitrogen (TKN) = 14.57 mg/l, Nitrate-Nitrite = 4.42 mg/l (ammonia decreased, nitrogens increased)

So go ahead with the permit modification for the other items. In the cover letter, please also tell them that we are shutting down our activated sludge process on or about June 1, 2006. But because nitrification has been verified to occur in the trickling filters, the pharmaceutical ammonia limit will continue to be "not applicable".

Doug

DEPARTMENT MEMO - ENVIRONMENTAL COMPLIANCE

TO: Mallinckrodt Industrial File
3600 N. Second St.

ACCT #: 21120596-00

FROM: Doug Mendoza

DATE: January 18, 2000

RE: PHARMACEUTICAL COMPLIANCE PLAN AND POLLUTANTS

As part of the 12/15/99 meeting between Mallinckrodt and MSD (NESHAP portions of the meeting are addressed under separate memo), Joe Jansen of Mallinckrodt provided the following:

1 - A revised treatment plan, indicating that all pharmaceutical wastestreams now will go to steam strippers (p.5, para. 2).

2 - lab results showing that the methyl cellosolve that was present in the BMR tests was actually amyl alcohol (which is unregulated under 40 CFR 439).

We also discussed net/gross (40 CFR 403.15) provisions for their chloroform.

See the attachments for each of the above items.

ENVIRONMENTAL COMPLIANCE

DEPARTMENT MEMO

FROM: Doug Mendoza

DATE: December 7, 1999

RE: 40 CFR 403.15 NET/GROSS CALCULATION

On 12/7/99, I called Paul Marshall to ask about item (c) of 40 CFR 403.15. Item (c) states, "The applicable categorical pretreatment standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis." As I told Paul, I am not aware of any standards that have added that provision. Paul said to apply the net/gross calculation to industries anyway. The spirit of the rule is to make allowances for situations that users can't control, and unless the standard specifically prohibits net/gross calculations, he thinks it should be allowed. (He was not aware of any standards that prohibit net/gross calculations.)

Note that in the EPA's 7/22/99 Proposed Rule - Streamlining the General Pretreatment Regulations, EPA states that including item (c) as a separate requirement to meet was a mistake. It should have been an "or" option for item (b)(1)'s "The Industrial User must demonstrate that the control system it proposes or uses to meet applicable categorical Pretreatment Standards would, if properly installed and operated, meet the Standards in the absence of pollutants in the intake waters." The Proposed Rule restates the section to correct the mistake.

serted at the time of submission in the manner prescribed on the application form or instructions, or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the information will be treated in accordance with the procedures in 40 CFR part 2 (Public Information).

(b) *Effluent data.* Information and data provided to the Control Authority pursuant to this part which is effluent data shall be available to the public without restriction.

(c) *State or POTW.* All other information which is submitted to the State or POTW shall be available to the public at least to the extent provided by 40 CFR 2.302.

§ 403.15 Net/Gross calculation.

Categorical Pretreatment Standards may be adjusted to reflect the presence of pollutants in the Industrial User's intake water in accordance with this section.

(a) *Application.* Any Industrial User wishing to obtain credit for intake pollutants must make application to the Control Authority. Upon request of the Industrial User, the applicable Standard will be calculated on a "net" basis (i.e., adjusted to reflect credit for pollutants in the intake water) if the requirements of paragraphs (b) and (c) of this section are met.

(b) *Criteria.* (1) The Industrial User must demonstrate that the control system it proposes or uses to meet applicable categorical Pretreatment Standards would, if properly installed and operated, meet the Standards in the absence of pollutants in the intake waters.

(2) Credit for generic pollutants such as biochemical oxygen demand (BOD), total suspended solids (TSS), and oil and grease should not be granted unless the Industrial User demonstrates that the constituents of the generic measure in the User's effluent are substantially similar to the constituents of the generic measure in the intake water or unless appropirate additional limits are placed on process water pollutants either at the outfall or elsewhere.

(3) Credit shall be granted only to the extent necessary to meet the applicable categorical Pretreatment Standard(s), up to a maximum value equal to the influent value. Additional monitoring may be necessary to determine eligibility for credits and compliance with Standard(s) adjusted under this section.

(4) Credit shall be granted only if the User demonstrates that the intake water is drawn from the same body of water as that into which the POTW discharges. The Control Authority may waive this requirement if it finds that no environmental degradation will result.

(c) The applicable categorical pretreatment standards contained in 40 CFR subchapter N specifically provide that they shall be applied on a net basis.

[53 FR 40614, Oct. 17, 1988, as amended at 58 FR 18017, Apr. 7, 1993]

§ 403.16 Upset provision.

(a) *Definition.* For the purposes of this section, *Upset* means an exceptional incident in which there is unintentional and temporary noncompliance with categorical Pretreatment Standards because of factors beyond the reasonable control of the Industrial User. An Upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(b) *Effect of an upset.* An Upset shall constitute an affirmative defense to an action brought for noncompliance with categorical Pretreatment Standards if the requirements of paragraph (c) are met.

(c) *Conditions necessary for a demonstration of upset.* An Industrial User who wishes to establish the affirmative defense of Upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An Upset occurred and the Industrial User can identify the cause(s) of the Upset;

(2) The facility was at the time being operated in a prudent and workman-like manner and in compliance with applicable operation and maintenance procedures;

(3) The Industrial User has submitted the following information to the POTW and Control Authority within 24 hours of becoming aware of the Upset (if this information is provided orally, a written submission must be provided within five days):

(i) A description of the Indirect Discharge and cause of noncompliance;

(ii) The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue;

(iii) Steps being taken and/or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(d) *Burden of proof.* In any enforcement proceeding the Industrial User seeking to establish the occurrence of an Upset shall have the burden of proof.

(e) *Reviewability of agency consideration of claims of upset.* In the usual exercise of prosecutorial discretion, Agency enforcement personnel should review any claims that non-compliance was

MSD 015977