

METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES (MCES)

**INDUSTRIAL DISCHARGE PERMIT
SPECIAL DISCHARGES**

Pursuant to the provisions of Minnesota Statutes Chapter 473 as amended, the Waste Discharge Rules for the Metropolitan Disposal System (MDS), and the MCES Leachate and Contaminated Groundwater Program, permission is hereby granted to

U of M - MLAC
410 SE Church St, W145
Minneapolis, MN 55455

for the discharge of contaminated groundwater
from 222 S 21st Ave, Minneapolis, MN 55455
into the Metropolitan Council's Metropolitan Wastewater Treatment Plant.

This permit is granted in accordance with the application previously submitted and in consideration of the plans, specifications, and data contained in the application.

Discharge Limitations, Monitoring and Reporting Requirements, Special Conditions regarding connected and non-connected sites, and Specific Permit Conditions are contained in the following sections of this Permit.

EFFECTIVE DATE: June 01, 2015

EXPIRATION DATE: May 31, 2018

Issued by METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES

L. Rogacki

May 29, 2015

General Manager, or duly authorized representative
Larry Rogacki, Assistant General Manager
Support Services Business Unit

Date

METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES (MCES)

A. Discharge Limitations

1. Local Pretreatment Standards

Parameter	Standard (mg/L)
Cadmium (Cd)	1.0
Chromium (Cr)	6.0
Copper (Cu)	4.0
Cyanide - total (CN)	4.0
Lead (Pb)	1.0
Mercury (Hg)	0.002
Nickel (Ni)	6.0
Zinc (Zn)	6.0
pH - maximum (Standard Units)	11.0
pH - minimum (Standard Units)	5.0

Local pretreatment standards for metals and cyanide are the maximum for any 24 hour period.

pH standards are continuous and apply at all times.

2. Additional Limitations:

The following limits apply to special discharges:

Concentration of any one toxic organic parameter	3 mg/L
Combined total toxic organics parameter concentration	10 mg/L
Total hydrocarbons (for petroleum-related discharges)	100 mg/L

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A. Discharge Limitations (continued)

3. Prohibited Waste Discharges:

Prohibited Waste Discharges are specified in Waste Discharge Rule 406 and include, but are not limited to the following: (a) Flammable, explosive, and corrosive wastes, gasoline, fuel oil, lubricating oil, hydraulic oil, motor oil, or grease; (b) Wastes that are likely to obstruct the flow within public sewers: grease, fat or oil of animal or vegetable origin, solid wastes, garbage, guts, bones, ash, sand, rags, lime, metal, wood, plastic, glass, or yard wastes; (c) Wastes that are likely to cause interference, pass-through or operational problems: slug discharges, toxic chemicals, poisons, dyes, or inks; (d) Wastes that are likely to cause a public nuisance: noxious, malodorous, or foam producing products; (e) Cooling water, runoff, and other unpolluted water; (f) Hazardous wastes, as defined by Minnesota Statutes; and (g) Waste generated outside of the Metropolitan Area, unless prior approval is obtained from MCES.

B. Monitoring and Reporting Requirements:

1. Sample Collection

Representative wastewater sample(s) shall be collected from the following sample locations. See Attachment A for sample collection frequency.

SP-01: Panning System Discharge

Samples shall be collected from the sump that contains discharge from the panning system.

SP-02: Horizontal Well Discharge

Samples shall be collected from the maintenance hole located at the intersection of 2nd Street S and 21st Avenue S.

2. Parameters

Chemical analysis, in accordance with Waste Discharge Rule 216, of the sample(s) representing the waste discharged through the specific sample location(s), shall be performed for the following parameters:

See Attachment A

3. Reporting Requirements

a) Schedule:

The Permittee is required to submit complete Special Discharge Reports to MCES 4 times per year according to the following schedule:

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B. Monitoring and Reporting Requirements (continued)

<u>Reporting Period</u>	<u>Reports Due in MCES Office by</u>
January 1 - March 31	April 30
April 1 - June 30	July 30
July 1 - September 30	October 30
October 1 - December 31	January 30

Reports shall be submitted each reporting period until this Permit is terminated, whether or not a discharge has occurred during a given reporting period.

b) Report Contents:

A complete report consists of an MCES Special Discharge Report form and a copy of the laboratory data sheets for all samples collected for this discharge during the reporting period. The total discharge volume for the reporting period shall be reported. Other pertinent information shall also be included, such as operational problems and changes, etc. The Permittee or a designated authorized representative shall sign the Special Discharge Report.

C. Special Conditions for Discharge Sites Not Connected to Public Sewers

1. Discharge Location

Permitted discharge for sites not connected to public sewers shall be transported by an MCES-permitted Liquid Waste Hauler to the Metropolitan Plant Liquid Waste Receiving Facility in St. Paul. As defined in Waste Discharge Rule 004.28, public sewers include MCES interceptors and all community-owned sanitary and combined sewers that are tributary to the MDS.

2. Load Charge

Transported discharges are be subject to a Load Charge which includes a volume component, a strength component, and a facilities cost component. The volume component is based on the volume rate that MCES charges all communities served. The strength component is based on volume, a Chemical Oxygen Demand concentration in excess of 500 milligrams per liter (mg/L) and a Total Suspended Solids concentration in excess of 250 mg/L. The facilities cost component includes debt service for capital costs for new or upgraded disposal sites, and associated operating costs. The Load Charge recovers the full cost of treating hauled liquid waste discharged into MCES facilities. The Out of Service Area Load Charge includes an additional service fee, determined by the Regional Administrator. The MCES rates used to calculate the load charge components are adjusted annually.

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D. Special Conditions for Discharge Sites Connected to Public Sewers

1. Connection Approval

A Permittee making a connection to a community-owned sewer or an MCES interceptor shall obtain approval from the appropriate authority prior to making the connection. Billing for sewer use shall also be arranged with the community.

2. Volume Measurement

The Permittee shall install and maintain an appropriate discharge volume metering device, in accordance with Waste Discharge Rules 213 and 215.

3. Temporary Capacity Charge (TCC)

Permitted sites that are connected to public sewers will be subject to a Temporary Capacity Charge for temporary use of reserve capacity in the MDS.

E. General Permit Conditions

1. All discharges into public sewers by the Permittee shall be in accordance with applicable provisions of the Waste Discharge Rules for the MDS, the MCES Leachate and Contaminated Groundwater Program and this Permit.

2. The Permittee shall not knowingly make any false statement, representation or certification in any record, report, plan or other document submitted to MCES.

3. The Permit shall not release the Permittee from any liability, duty or penalty imposed by local, state or federal statutes, regulations, ordinances or license requirements regarding waste disposal.

4. The Permittee shall take all reasonable precautions to minimize all accidental discharges including prohibited slugs, spills and bypasses. Plans for the prevention and control of accidental discharges shall be submitted to the Industrial Waste & Pollution Prevention Section for approval within a specified period of time when required by MCES. **In the event of any significant accidental discharge, spill or bypass, the Permittee shall IMMEDIATELY notify the Minnesota State Duty Officer at (651) 649-5451 and report the facility address, and other pertinent information.** In accordance with Waste Discharge Rule 412, for sites connected to public sewers, the Permittee shall post a permanent notice in a prominent place advising employees how to notify the Minnesota State Duty Officer in the event of an accidental or prohibited slug discharge.

5. The Permittee shall notify the Industrial Waste & Pollution Prevention Section within 24 hours of becoming aware of any violation of the Discharge Limitations in Section A. of this Permit.

6. The Permittee shall pay applicable Permit fees, temporary capacity charges, Strength Charges, Load Charges, self-monitoring report late fees and other cost recovery fees assessed by MCES.

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E. General Permit Conditions (continued)

7. In accordance with Waste Discharge Rule 211, the Permittee shall not assign or transfer an Industrial Discharge Permit (Special Discharges) to a new owner, without written approval of MCES.
8. In accordance with Waste Discharge Rule 214, the Permittee shall unconditionally allow MCES personnel to enter the Permittee's premises for the purposes of inspection, monitoring, records review or any other actions, needed to verify information received by MCES or determine compliance with the Waste Discharge Rules and this Permit. The Permittee shall not place conditions upon entry of MCES personnel to the Permittee's premises. In the event that an employee of MCES signs any document agreeing to conditions of entry, including, but not limited to confidentiality of information, this Permit supersedes any such agreement.
9. The Permittee shall retain its waste disposal records, in accordance with Waste Discharge Rule 214, for a period of not less than three years.
10. The laboratory reports for all wastewater monitoring conducted during each reporting period, at the point of discharge into public sewers, shall be submitted with the Special Discharge Report for that period. Reports must be submitted each reporting period until this Permit is terminated. Sample collection and analytical methods shall meet EPA protocol established in 40 CFR Part 136.
11. The Permittee shall report any operational changes or practices which differ from those described in the original Special Discharge Permit application, including changes in pretreatment system design or operation, or rate of discharge. The Permittee shall also notify the Industrial Waste & Pollution Prevention Section within 48 hours if the discharge is temporarily or permanently discontinued.
12. This Permit supercedes any MCES discharge approvals or Industrial Discharge Permits previously issued for the discharge of landfill leachate, contaminated groundwater or special industrial waste from this site into the Metropolitan Disposal System.
13. This Permit is not exclusive. This Permit shall not release the Permittee from conditions set forth by the Minnesota Pollution Control Agency, Minnesota Department of Health, Minnesota Department of Natural Resources or the community in which the site is located.
14. The Permittee shall be subject to civil liability as a result of discharges which violate the Waste Discharge Rules, applicable federal pretreatment standards or requirements, or any requirement or condition contained in this Permit. Further, any violation may also result in the Permittee being subject to civil and/or criminal penalties in the amount of \$1,000 per day, 90 days imprisonment, or both.

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E. General Permit Conditions (continued)

15. Information and data that Permittees submit to MCES shall be available to the public as required by Waste Discharge Rule 221, the Minnesota Government Data Practices Act, Minnesota Statutes, chapter 13, 40 CFR part 403.14 or any other applicable law. The Permittee may make a written request that certain submitted information remain confidential. If MCES determines that this information is eligible for classification as confidential, then the information will not be made available to the public. Information determined to be confidential will remain available only to MCES or any other public agency with the authority to view such information. Information that MCES needs to determine applicable regulations, compliance with the Waste Discharge Rules, or characteristics of the wastewater discharge cannot be deemed confidential.

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F. Specific Permit Conditions

1. The Permittee shall operate the groundwater collection system in such a manner as to maintain the discharge limits found in Section A. of this permit. If analytical data indicate that the contaminated groundwater is in violation of permit limits, the extraction system shall be immediately shut down. The Permittee shall not resume discharge to the sanitary sewer without MCES approval.
2. The Permittee shall operate the groundwater collection system in such a manner that toxic vapors are not created at hazardous levels in the downstream sewer line.
3. During the fourth quarter of each year, the contaminated groundwater collected at both SP-01 and SP-02 shall be analyzed for pH, Total Suspended Solids and Chemical Oxygen Demand. Additionally, during the fourth quarter of each year, the discharge from SP-01 shall be analyzed for zinc. If the groundwater extraction system is expected to be non-operational during the fourth quarter, then the contaminated groundwater shall be analyzed during an earlier reporting period. Note that the discharge from SP-01 shall be analyzed for Total Suspended Solids on a quarterly basis as detailed in Attachment A.
4. Weekly safety system checks of the horizontal well treatment system will result in approximately 300 gallons of treated water being discharged to the sanitary sewer. Because of the low volume of these discharges, MCES will only require sampling of this discharge (SP-02) once per year, during the fourth quarter. If treated discharge from the horizontal well is ever discharged to the sanitary sewer in a non-testing situation (i.e., a bypass of the storm sewer discharge), one sample per quarter of that discharge shall be collected and analyzed in accordance with Attachment A.
5. The Permittee may discharge neutralized wastewater resulting from the acid cleaning of air-stripper components, drain piping, or the panning system. A written log that records the date, pH and volume of these batch discharges shall be submitted with each Industrial Waste Discharge Report.
6. Discharge from the horizontal well shall be routed through a pretreatment system that includes liquid-phase carbon adsorption and hydrogen sulfide treatment.

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Attachment A

Sampling Requirements from Section B.2.

Sampling Location: SP-01, Panning System Discharge

Analytical Method (1)	Analyte Description	Minimum Sample Collection Frequency (2)
EPA 150.1	pH	One Grab Sample Per Year During Fourth Quarter
EPA 160.2	Total Suspended Solids	One Grab Sample Per Quarter
EPA 410.4	Chemical Oxygen Demand	One Grab Sample Per Year During Fourth Quarter
EPA 200.7	Total Metals <i>Zinc</i>	One Grab Sample Per Year During Fourth Quarter
EPA 624 EPA 8260	Purgeables or Volatile Organic Compounds <i>Benzene</i> <i>Ethyl Benzene</i> <i>m-Xylenes</i> <i>o-Xylenes</i> <i>p-Xylenes</i> <i>Toluene</i>	One Grab Sample Per Quarter
EPA 625 EPA 8270	Base/Neutral Extractables or Semi-Volatile Organic Compounds	One Grab Sample Per Quarter
WI DRO (95)	Diesel Range Organics <i>Gasoline Range Organics</i>	One Grab Sample Per Quarter

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Attachment A - Continued

Sampling Requirements from Section B.2.

Sampling Location: SP-02, Horizontal Well Discharge

Analytical Method (1)	Analyte Description	Minimum Sample Collection Frequency (2)
EPA 150.1	pH	One Grab Sample Per Year During Fourth Quarter
EPA 160.2	Total Suspended Solids	One Grab Sample Per Year During Fourth Quarter
EPA 410.4	Chemical Oxygen Demand	One Grab Sample Per Year During Fourth Quarter
EPA 624 EPA 8260	Purgeables or Volatile Organic Compounds <i>Benzene</i> <i>Ethyl Benzene</i> <i>m-Xylenes</i> <i>o-Xylenes</i> <i>p-Xylenes</i> <i>Toluene</i>	One Grab Sample Per Quarter
EPA 625 EPA 8270	Base/Neutral Extractables or Semi-Volatile Organic Compounds	One Grab Sample Per Quarter
WI DRO (95)	Diesel Range Organics <i>Gasoline Range Organics</i>	One Grab Sample Per Quarter

- (1) All samples shall be collected, preserved and analyzed in accordance with the procedures and methods established above and/or in 40 Code of Federal Regulations Part 136 and amendments.
- (2) Sampling and/or analysis is not required during reporting periods when there is no discharge to the Metropolitan Disposal System.