Stormwater Sampling at Industrial Stormwater Sites
for Environmental Compliance

UMTC-Southeast Steam Plant (Bldg 059), Main Energy Plant (034 Bldg), Como Recycling Facility (Bldg 099), Fleet Services Facility (Bldg 185)

Procedure summary
Use this procedure for these stormwater sampling tasks at UMTC permitted stormwater sites for Environmental Compliance reporting:
(1) place stormwater sampling devices; and,
(2) verify and/or collect samples.

Start
(1) Once quarterly during the first week of each calendar quarter AND
(2) after ½” rain or significant melt event while sample bottle is installed.

Materials
(1) Stormwater sample device for each 'hanging' sample site, Chain of Custody form for each location, labeled stormwater sample bottle for each sample indicated on the Chain of Custody forms, manhole hook, 5 large zip ties, Sharpie marker (thin), ball point pen, multi-tool.
(2) Standard 1L plastic bottle cover for each sample bottle, Chain of Custody form for each location, manhole hook, 5 large zip ties, Sharpie marker (thin), ball point pen, multi-tool

Notes
Stormwater samples are required to be collected for each site with a

A specific 30-day interval is not required, but “monthly” intervals throughout the year for each set of well readings should be consistent and regular. The suggested order for reading well reading is presented in this SOP, but the wells can be read in any order.
1. Locate the relevant well meter at each location.
   
   **CE East Exterior Meter**
   
   **CE West Exterior Meter**

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<th>1.</th>
<th>Locate the relevant well meter at each location.</th>
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<tr>
<td>a.</td>
<td>Civil Engineering Building (Bldg 156)</td>
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<tr>
<td>1.</td>
<td>East and West Exterior Well Meters (Room 90)</td>
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<td>- The well meters for both exterior wells are located in on the Ground Floor in the Room 90 Mechanical Room.</td>
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<td>- Enter the Building at the loading dock on the east side of the building. Once in the building, Room 90 is nearly directly ahead.</td>
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<td>- Access the mechanical room and proceed to the back of the space, to the right.</td>
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<td>- Both exterior meters are located on the back wall of the room.</td>
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1. (cont) Locate the relevant well meter at each location.

CE East Interior Well Meter

Aquatics Meters

E River Road Meter

2. East Interior Well (Room 690)

- The well meter is located on Level 6 on top of the discharge line at the ceiling.
- From Room 90, use the stairs or the freight elevator across the hall to get to Level 7.
- The meter is in the hallway at the ceiling near the freight elevator.

b. Aquatics Center (Bldg 167): North Loading Dock

- Two meters for the Aquatics Center are located on the south side of the North loading dock driveway.
- The well meters are attached to the outside of the well casing that is on the top of the south berm.

c. E River Road Parking Ramp (Bldg 183): Room G004

- The well room is located on Level G of the parking ramp structure.
- Using the Plaza entrance to the parking ramp (south side of Coffman Union), take the elevator to Level G.
- On Level G, exit the elevator tower to the right and go around the corner (~25 feet) to the right to Room G004. The well meter is mounted on the south wall near the entry.
2. Read and record flow values on each meter.

EHS Staff reads each permitted pump meter monthly to collect the totalized value of water pumped from each location.

a. Verify that each meter is functioning
   1. If a meter is not functioning, send an email to the relevant FM District Manager to let them know. Copy Julianne Rantala (jrantala@umn.edu) on the email/correspondence.

   Civil Engineering (Bldg 156): East Bank District
   Greg Berger: 4-2096 or berge024@umn.edu

   Aquatics Center (Bldg 167): North District
   Mike Garza: 5-5023 or garza022@umn.edu

   E River Road Parking Ramp (Bldg 183): Health Sciences District
   Ron Mapston: 5-6174 or mapst001@umn.edu

   Note: Document date/s of District service request and date of corrective action on the Well Log (see below).

b. Record the currently displayed value on each meter on the GoogleDrive UMN_Well_Log document:

   Note: The following elements must be recorded on the log sheet: date, time, person reading, flow value (with units indicated (gal)). Note any permanent zeros from the meter along with the read value.

c. Record the reading value for each meter on the "[date]_01_PumpReadings.xlsx" spreadsheet.
   1. Add a row to the list of readings for each meter and location.
   2. Save the file and change the name of the document to reflect the date of your update.
   3. Email Julianne Rantala (jrantala@umn.edu) each month when completed.

Result
Flow meters used for water appropriation permit compliance are read monthly and values are recorded for reporting purposes.

Task standards
- Meters are read monthly.
- Documentation of readings and any meter corrective actions are maintained.