

COMBINED SEWER OVERFLOWS - GENERAL INFORMATION

BACKGROUND:

Combined sewer systems are systems where sanitary and storm discharges are combined into a single intercepting sewer. This older technology is generally in the central part of Elgin and is influenced by upstream separate sewer connections. When these sewers need replacing, they are being replaced with two separate sewer systems. One sewer carries sanitary flows to a treatment plant and the other carries storm flows directly to surface waters. This replacement will take many years due to a sewer's long life span. This solution has been shown to have a positive effect upon the Fox River and it is approved by the Illinois Environmental Protection Agency and the Illinois Pollution Control Board.

During storms, combined sewer areas can produce sewer flows that are substantially greater than dry-weather flows. These increased combined sewer flows, beyond first flush, could hydraulically overload the District's Water Reclamation Plants and may reduce treatment effectiveness. To avoid this, some combined sewers overflow the diluted flow into the river during storms. However, the initial flows of intense storms and flows of light rains flow to our treatment plants to assure no undiluted overflow reaches the river.

Businesses in the combined sewer areas are exempt from the NPDES Stormwater Permitting Requirement directly. This is because the combined sewer flow is covered by the municipal sewer NPDES permit. However, two of the requirements for the municipal sewer NPDES permit require non-domestic dischargers to inventory and control their discharges **to the extent feasible**.

Your cooperation is appreciated. Please call Beth Vogt or Michael Dacka at 847-742-2068 if you have any questions or comments.

INFORMATION FOR BUSINESSES THAT EFFECT COMBINED SEWER OVERFLOWS.

REQUIREMENTS:

Among the requirements for the District, will be to:

- Inventory all non-domestic discharges.
- Evaluate their significance on the river.
- Evaluate feasible changes that can be done to reduce the impact of combined sewer overflows on the river.

Much of this work has been done when justifying the current plan to the Illinois Pollution Control Board. However, the inventory data must be continually updated.

Individual businesses will be required to:

- Inventory their individual discharges to the sewers.
- Confirm those roof drains, footing drains, and sump pumps discharge onto the ground, to a drywell or to a separate storm sewer.
- Institute policies that hold voluntary discharges (especially batch discharges) during storm events.

The information provided by all businesses will be confirmed during the District's regular walk-through inspections. Businesses that have sanitary and hand-washing discharges only, will be required to state this in writing and confirm their drain and sump pump situation.

EXAMPLE CSO AREA DISCHARGE PERMIT SPECIAL CONDITIONS

1. Collect data and information for a Combined Sewer Discharge Inventory. This information must be included in all permit renewal applications. In addition, the first Combined Sewer Discharge Inventory will be due on _____
 - Inventory the typical daily discharge. Include estimates of all flow streams.
 - Record in a batch discharge log, each individual discharge greater than 500 gallons that is not included in the typical daily discharge.
2. User shall provide a procedure whereby the process waste is diverted to the 150 gallon storage tank during any storm greater than 0.01 inches of rain or melted snow. This diverted waste must be held for a minimum 6 hours after such storm.

EXAMPLE COMBINED SEWER DISCHARGE INVENTORY

1) DO ALL ROOF DRAINS, FOOTING DRAINS AND SUMP PUMPS DISCHARGE ONTO THE GROUND?

YES. _____ IF NOT, TO: _____

2) SAMPLE DAILY DISCHARGE INVENTORY

Flow Description	Continuous or Batch Flow?	Flow Rate Estimate	Is This a Daily Flow?	Can it be held?
Sanitary, hand washing etc.	Batch, but throughout the day	2,000 gpd (gallons per day)	yes	no
Parts cleaner, final rinse flow	Continuous	5,000 gpd	yes	no
Parts cleaner, soap tank after removing oil and solids	Batch	500 gallons per cleaning	one batch every other day	yes, for a few hours

3) SAMPLE BATCH DISCHARGE LOG

Flow Description	Dates of Discharge	Volume of Each Batch	Can/was it held during storm?
Water deionizer regeneration	05/01/2012 11/25/2012	750 gallons	yes it can
Cooling tower, yearly cleaning * We schedule this work to fit maintenance's needs. We will now only schedule this work when rain is not expected as well.	Batch, last done 11/15/2012	2,000 gallons per cleaning	held 9 hrs * see note
Full system cleaning	01/15/2012 03/18/2012 05/10/2012 08/05/2012 11/01/2012	1,000 gallons	no

COMBINED SEWER DISCHARGE INVENTORY

DO ALL ROOF DRAINS, FOOTING DRAINS AND SUMP PUMPS DISCHARGE ONTO THE GROUND? _____
 IF NOT, TO: _____. If yes, this is okay. If not and you are in a combined sewer area, you may be required to change their discharge point. If not and you are in a separate sewer area that affects a combined sewer downstream, drains and sump pumps can be legally discharging to storm sewers. FRWRD may dye-test the discharge to confirm that the flow goes to storm sewers.

2) TYPICAL DISCHARGE INVENTORY TABLE

Use this table to document your typical discharge flows.

Flow Description	Continuous or Batch Flow?	Flow Rate Estimate in gallons/day	How many days/week?	Can it be held during storms?
<i>Sanitary, bathroom flows, hand washing (this does not include floor cleaning or any process flows)</i>	<i>Batch throughout the day</i>	_____ <i>gpd</i>	<i>Every day</i>	<i>No</i>

(attach additional sheets if necessary)

Company Name	Company Address	Phone Number
Printed Name	Signature	Date

