



Combined Sewer Overflow Public Notification Plan

**City of Lakewood, Ohio
August 3, 2018**

Goal of Plan

To develop a notification plan that describes how the City of Lakewood will ensure that the public receives adequate notification of CSO occurrences. The information in this plan is intended to help the community understand the performance of the Lakewood collection system and how the City's ongoing investment will reduce overflows further. CSO Public Notification Plan requirements are shown below in **bold text**.

Section 1: Identify the location of signs and the location of any CSO discharge point where a sign is not provided. Where a sign has not been provided at a CSO discharge point, the plan shall explain why a sign at that location is not feasible or was otherwise determined to not be necessary.



Above is a map of all outfall locations. All Rocky River outfalls have signs. All other outfalls are on private property and release over a shale cliff approximately 50 feet above the lake surface, making a sign not feasible.

Section 2: Describe the message used on signs.

Below is an image of the sign that is on all CSO discharge pipes on the Rocky River.

**Section 3: Describe protocols for maintaining signage (e.g., inspections at set intervals).**

Signs will be inspected yearly at a minimum and will be replaced or repaired whenever they have been damaged.

Section 4: Identify any affected public entities, municipalities, public drinking water supplies, public parks with water access, and/or Indian Tribe(s), and describe other sensitive area(s) identified in the permittee's long-term CSO control plan, that may be impacted by the permittee's CSO discharges.

Agencies and parks which were contacted with regard to CSO notification include the following:

Entity Name	Response	Phone	Address
Cuyahoga County Board of Health	Megan Symanski (msymanski@ccbh.net) will review the plan. She and Domenica McClintock (dmcclintock@ccbh.net) will be notified of CSOs via email listserv.	216-201-2001 x1248	5550 Venture Drive Parma, OH 44130
Cleveland Metroparks; Edgewater Beach, Rocky River Marina	Dan Hearn, Marina Manager, djh1@clevelandmetroparks.com wants to be notified. Matt Krems, Lakefront Manager, 216-780-1304, mlk@clevelandmetroparks.com also wants to be notified; Terry Robison, Director of Natural Resources wants to be notified (tlr@clevelandmetroparks.com) Rick Ditch, Rocky River Reservation Manager could not be reached via phone.	216-554-1601	4101 Fulton Parkway Cleveland, OH 44144
City of Rocky River	Mary Kay Costello, Director of Public Safety will refer to website.	440-331-0600 x2581	21012 Hilliard Blvd, Rocky River, OH 44116
Clifton Beach Club	Kathy Stringer, manager, wants to be notified: Kathy.s@cliftonclub.com .	216-521-3051	17884 Lake Rd, Lakewood, OH 44107
Cleveland Water Pollution Control	Left message with Jennifer Heard 5/31.	216-664-2750	12302 Kirby Ave, Cleveland, OH 44108
Cleveland Yachting Club	Left message with Mark Dallas on 6/12/18.	440-333-1155 x225	200 Yacht Club Dr, Rocky River, OH 44116

Beach Cliff, private beach in Rocky River	Called Kelly Asmar but no response.	216-440-7366	NA
Ohio EPA, Division of Surface Water, NEDO	Left message with Melanie Barbis; she and Erm Gomes would like to be on the listserv (erm.gomes@epa.ohio.gov and Melanie.barbis@epa.ohio.gov)	330-963-1251	2110 E. Aurora Road, Twinsburg, OH 44087

Lakewood's NPDES permit lists Lake Erie as a "sensitive area." Lake Erie and Rocky River have primary contact recreation designations, although the City of Lakewood does not have any primary contact recreation facilities, such as public beaches with life guards and bathroom facilities. The one private primary contact recreation facility located within city limits is a private beach club, The Clifton Club, which has been contacted about this CSO notification plan. A previous Long Term Control Plan did not find any additional sensitive areas.

Section 5: Summarize significant comments and recommendations raised by the local public health department.

Megan Symanski of Cuyahoga County Board of Health reviewed the plan and asked that Lakewood add Domenica McClintock to the email listserv. No other comments were given.

Section 6: Describe protocols for the initial and supplemental notice to public health departments and other public entities.

For the Initial Notification, the updated website (<http://cso.onelakewood.com/>) will be provided to the public and the county health department will be emailed within four hours of becoming aware of an overflow event. The initial notice will have the following information included:

1. Date and time the discharge commenced
2. Location of discharge
3. Water body that received the discharge
4. Whether the discharge is continuing at the time of notification
5. Impacted public access areas, if any, that may be affected by this overflow
6. Municipality point of contact: Mark Papke, City Engineer, 216.529.6807, Mark.Papke@lakewoodoh.net

The supplemental notification will be provided to the public and other interested parties within 7 days. The supplemental notice will have the following information added:

1. Statement that the CSO has ended
2. Date and time the discharge ended
3. Measured volume

Templates for the initial and supplemental notices are located in Appendix A.

Section 7: Describe protocols for the initial and supplemental notice to the public; this shall include a description of circumstances under which the initial notification of the public may be delayed beyond four hours of the permittee becoming aware of the discharge, which shall only include circumstances where a physical action is needed to limit the public health impacts of a CSO discharge by controlling the CSO discharge (including continuing to implement its existing practice of conducting inspections of CSO discharge points during the discharge), and all available staff are required to complete this action, and, therefore, are not available to initiate the initial notification until this action is complete

The following outreach efforts will be made to notify the public that they may be added to the notification list:

- Language will be added to the water bill once per year that describes the CSO Public Notification Program and lists instructions on how to be notified.
- Social media content will be developed and disseminated annually, describing the CSO Notification program and informing readers how interpret the information provided on the city's website.
- Lakewood's official website (<http://cso.onelakewood.com/>) will be updated within four hours of becoming aware of an overflow event. A nearly real time map of the potential CSO locations will be shown and shaded in different colors to indicate whether a CSO event is occurring. The symbol at the potential overflow points will be shaded "green" for no CSO event, "yellow" for a CSO event within the past 48 hours, and "red" for CSO event currently in process. The website also contains educational materials about CSOs and annual reports. The website will be linked to the Cuyahoga County Board of Health website.

Initial and supplemental notices will have the same information that is provided for the public health department. Initial notices will be sent within four hours of becoming aware of an overflow.

The data will be picked up by the flow sensors and translated onto the website. This automatically happens when the website is loading onto the reader's screen as it queries the database and displays the data. The database is held at CT Consultants where all flow meter data is routed. CT Consultants will make sure the website is functioning properly and that the automatic event detection is working.

CT Consultants' system uses custom SQL (Structured Query Language) functions that will automatically estimate overflow volumes from the data. Estimated volumes for overflow events are included in the follow-up notification emailed out, and at the time of the follow-up notification, that supplemental data will also be displayed on the website.

If an overflow event needs human approval, the system alerts CT Consultants staff and staff will review data quality and make a determination if an overflow occurred or not. This determination will be made within four hours of learning of the situation. This may be more

than four hours from the onset of the wet weather event if the event happens during non-business hours.

Section 8: Describe, for each CSO discharge point, how the volume and duration of CSO discharges shall be either measured or estimated. If the Great Lakes Basin CSO permittee intends to use a model to estimate discharge volumes and durations, the plan must summarize the model and describe how the model was or will be calibrated.

- Flows are recorded using sensors. Flow data is sent wirelessly to a data collection system at CT Consultants. This data is reviewed for quality assurance and quality control and then queried by the website. Lakewood's CSO website is: cso.onelakewood.com. This website is clickable from the main page, onelakewood.com.
- All CSO discharges are subject to notification and all are outfitted with sensors, except for 002 which is an overflow at the plant discharge tunnel. The 002 sensor is currently being rehabilitated for replacement with a real time sensor. The new sensor is expected to be operational by November 7, 2018.

Section 9: Describe protocols for making the annual notice available to the public and the Director.

Annual Notice summarizing the year's overflow events will be placed on the website and the availability of the notice will be provided to the US EPA (NPDES_CSO@epa.gov), Ohio EPA, and the Cuyahoga County Board of Health. A link will be included in resident's water bill alerting them to the location of the annual notice. This report will be available annually, starting on May 1, 2019. A template for the annual report is located in Appendix B.

Section 10: Describe significant modifications to the plan that were made since it was last updated.

This is the first year of the plan; therefore, no modifications have been made thus far.

Appendix A

Initial and Supplemental

Email Notification Templates

Initial Notification:

To all concerned agencies and public recipients:

A combined sewer overflow (CSO) has begun from the City of Lakewood's wastewater collection system. Pertinent information is as follows:

Date and time begun: mm/dd/yyyy hh:mm am/pm
Location of discharge: Rocky River and Lake Erie
Treatment provided: None
Status at time of notification: active/not active
Public access areas affected: Unknown
For more information contact: Mark Papke, City Engineer, 216.529.6807,
Mark.Papke@lakewoodoh.net

Supplemental Notification:

To all concerned agencies and public recipients:

A combined sewer overflow (CSO) has ended from the City of Lakewood's wastewater collection system. Pertinent information is as follows:

Date and time begun: mm/dd/yyyy hh:mm am/pm
Date and time ended: mm/dd/yyyy hh:mm am/pm
Total CSO volume: x million gallons
Location of discharge: Rocky River and Lake Erie
Treatment provided: None
Status at time of notification: not active; the event has ended
Public access areas affected: Unknown
For more information contact: Mark Papke, City Engineer, 216.529.6807,
Mark.Papke@lakewoodoh.net

Appendix B

Annual Report Template

CSO Notification Plan

City of Lakewood, Ohio
CSO Notification Plan
Annual Report for 20__

The City of Lakewood has combined sewer overflows (CSO) on Lake Erie and Rocky River. Public access areas affected by CSOs are unknown. For the year of 20__, the city has had __ overflow events.

A summary of (this/these) event(s) is as follows:

Event No.	Sites	Date/Time at Start	Date/Time at End	Cause of CSO Event	Total Rainfall (inches)	Total CSO Volume (MG)	Treatment Provided (Y/N)
1.		mm/dd/yy hh:mm	mm/dd/yy hh:mm				
2.							
3.							
4.							
5.							
6.							

The City of Lakewood is working on an Integrated Wet Weather Improvement Plan that will significantly reduce overflow events. The plan is due in March 2019 and currently incorporates increasing treatment capacity at the plant, reducing infiltration to the sewers, and increasing permeable surfaces where appropriate.

For more information contact Mark Papke, City Engineer, 216.529.6807, Mark.Papke@lakewoodoh.net

The City of Lakewood, operates and maintains its collection system in accordance with the U.S. EPA's 1994 nine minimum controls (*Federal Register / Vol.59, No.75 / Tuesday, April 19, 1994 / Notices* Section II B. page18691). A brief description of the controls and Lakewood's activities for this reporting year follows:

Control 1—Reducing CSOs Through Operation and Maintenance

Lakewood continued to implement its operation and maintenance program for the combined sewer collection system, including: cleaning and televising sewer mains, catch basins and manholes.

Control 2—Storing CSOs in Collection System

To maximize as much sewage storage as possible in the collection system, the interceptor is filled prior to any CSO discharge. This is routinely done in order to reduce the magnitude, frequency, and duration of CSOs.

Control 3—Optimizing Pretreatment Program

Lakewood monitored the industrial pretreatment discharges. This was done to minimize CSO pollutants from the discharges of non-domestic users.

Control 4—Maximizing Flow through the Treatment Plant

Lakewood continued to operate the WWTP at its maximum treatable flow rate during wet weather flow conditions. This is routinely done to reduce the magnitude, frequency, and duration of CSOs.

Control 5—Preventing Dry-Weather Overflows

There were no dry weather overflows at Lakewood's CSO outfall during this reporting year.

Control 6—Controlling Solids and Floatables

Lakewood maintains street sweeping from March-November every year. Volume over the past year of debris collected was 1,920 cubic yards.

Control 7—Preventing Pollution of Receiving Water Bodies

To reduce the impact of CSOs, the first flush during the CSO event(s) is routed to additional treatment capacity at the plant.

Control 8—Notifying the Public

In 2018, a public notification process was implemented to inform the EPA, Cuyahoga County Board of Health, and interested citizens when CSOs occur.

Control 9—Monitoring CSO Outfalls to Confirm the Effectiveness of CSO Controls

Lakewood continued to monitor the CSO outfalls to characterize CSO discharges. Monitoring included metering the volume of the CSO discharge, visually inspecting the overflow for floatables, and sampling the initial overflow for pollutant concentrations.