

**Valparaiso Water Reclamation Department
Elden Kuehl Pollution Control Facility**

**Combined Sewer Overflow (CSO)
Annual Notification
2019**

**A summary of past calendar year data pursuant to the USEPA's reporting requirements
at 40 CFR Part 122.38(b)**

Completed by the Valparaiso Water Reclamation Department

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1. Description and Location of CSO, Receiving Stream, Treatment Provided and Public Access Areas (that may be affected)

The City of Valparaiso’s Wastewater Treatment Plant (WWTP), known as the Elden Kuehl Pollution Control Facility (EKPCF), has a wet weather treatment facility (WWTF) with only one (1) Combined Sewer Overflow (CSO) Outfall that is designated as Outfall #002. This outfall is located at Latitude: 47° 27' 55" N, Longitude: 87° 04' 24" W and is approved by the Indiana Department of Environmental Management (IDEM) for precipitation related discharges when plant influent flows exceed the EKPCF’s peak hourly design rate of 18.0 million gallons.

The WWTF provides primary clarification, disinfection with sodium hypochlorite and neutralization with sodium bi-sulfite to combined wet weather and sanitary wastewaters before discharging into the plant’s receiving water known as Salt Creek in Porter County, Indiana. The City of Valparaiso’s Creekside Golf Course is the only public access location downstream of the WWTF and CSO Outfall along Salt Creek.

2. Flow and Precipitation Data Summary

There were three (3) wet weather events experienced by the EKPCF in 2019. They were caused by excessive rain fall and/or snow melt. The flow and precipitation data during these events are summarized in Table 1 below:

Table 1
Flow and Precipitation Data Summary*
2019

Date	Average Daily Flow*	Peak Hourly Flow*	Time Precip. Began*	Precip. Duration (Hours)*	Total Daily Precip.*	Peak Intensity (Inches/Hour)*
5/1/2019	20.134	18.5	5:30 a.m.	22.5	1.82	5.0
6/20/2019	18.452	18.5	7:00 p.m.	11.5	1.01	2.9
9/27-28/2019	18.145	19.0	12:00 p.m.	20	4.39	8.0

*In Million Gallons per Day

*May include consecutive days reported as a singular event as required by the IDEM issued NPDES Permit

**In Million Gallons per Day (MGD)

3. Wet Weather Results Summary

There were three (3) wet weather events experienced by the EKPCF in 2019. These wet weather events are summarized, including required analytical data, in Table 2 below:

Table 2
Wet Weather Results Summary
2019

Date	Cause for Wet Weather Event	Location	Approximate Duration (Hours)	Measured Volume in MGD	CBOD5 mg/L	TSS mg/L	pH High	pH Low	E. Coli CFU/100 mL
5/1/2019	Excessive Rain	Outfall #002	22.5	7.274	24.1	50.9	7.2	6.6	5
6/20/2019	Excessive Rain	Outfall #002	11.5	0.083	>113.2	66.3	6.3	5.7	3
9/27-28/2019	Excessive Rain	Outfall #002	20	103.996	57.7	50.7	7.8	5.7	8

4. Dry Weather Results Summary

There were no dry weather CSO Events experienced by the EKPCF in 2019.

5. Permittee Contact Information

Valparaiso City Utilities
Water Reclamation Department
1251 Joliet Road
Valparaiso, Indiana 46385
(219) 462-6174

6. Nine Minimum Controls (NMC) Summary

NMC1: Proper Operation and Regular Maintenance

The Valparaiso City Utilities Collection and Distribution (C & D) Department regularly maintains the City of Valparaiso's Sanitary and Stormwater Collection Systems with 24 employees, two (2) Vector trucks (sewer cleaning), one (1) video inspection truck, pick-up trucks, other work trucks, a backhoe and an excavator. The C & D Department also has GIS and locating capabilities along with an annual

capital improvement plan for the collection system. A preventative maintenance program is in place utilizing the City's *Lucity Work Management System* to insure equipment is maintained on a frequent basis.

NMC2: Maximization of Storage in the Collection System

The City of Valparaiso currently has only one (1) CSO outfall located at the WWTP. There are currently no inlet restrictions for the combined sewer area and the City's Collection System is maximized for storage during wet weather events. Previous engineering studies from 1994 and 2000 showed capacity remaining in the system as noted in the Water Reclamation Department's approved CSOOP.

NMC3: Pretreatment Program Review

The Valparaiso Water Reclamation Department's IDEM approved Industrial Pretreatment Program is designed, among other responsibilities, to prevent non-domestic type pollutants from entering into the City's Collection System. This would then prevent these types of pollutants from potentially arriving at the EKPCF and further entering the WWTF during wet weather events which ultimately discharges through the CSO Outfall and into the receiving stream. The Pretreatment Program includes a Laboratory/Pretreatment Administrator and a Pretreatment/Laboratory Analyst Technician.

The Pretreatment Program's work includes classification, permitting, inspections, analysis, compliance monitoring and enforcement of all users of the City's Collection System which includes, but is not limited to, four (4) significant industrial users.

NMC4: Maximization of Flow to the WWTP

The Valparaiso City Utilities' Long-Term Control Plan (LTCP) was completed in December of 2011 and included a Phase I and Phase II expansion of the EKPCF to an average daily flow of 8.0 MGD and a wet weather flow of 18.0 MGD. This plant expansion was from a prior 6.0 MGD average daily flow and a wet weather flow of 9.0 MGD in order to allow for a two (2) fold increase in wet weather flow treatment capabilities at the EKPCF.

NMC5: Prevention of Dry Weather Discharges

The EKPCF's CSO structures and WWTF are reviewed by operational staff daily. A preventative maintenance program is in place utilizing the City's *Lucity Work Management System* to insure equipment is maintained on a frequent basis.

The C & D Department has a televising truck and two (2) Vactor (sewer cleaning) trucks to inspect and maintain the collection system.

There were no dry weather CSO Events experienced by the EKPCF in 2019. If a dry weather overflow event does occur, it is properly reported to the IDEM and kept on file at the EKPCF.

NMC6: Control of Solids and Floatable Materials in CSOs.

The EKPCF has two (2) Romag screens with 1/6" openings and a design capacity of 100 MGD in place to prevent floatables from entering the CSOs in a wet weather event. The Romag screens function by utilizing a "combing" mechanism to push debris back into the Influent channel at the EKPCF and then are removed by the EKPCF's Huber step screens thereby preventing floatable materials from being discharged from the CSO outfall.

NMC7: Pollution Prevention Program

This is accomplished by the City of Valparaiso's Public Works Department (VPWD) which collects trash and recyclables, cleans the City's streets with two (2) street sweepers and a dump truck and collects leaves in leaf trucks which are taken to the City compost center which is operated by the Porter County Solid Waste Department (PCSWD).

The PCSWD has four (4) to five (5) Hazardous Waste Collections per year which are announced through radio advertisements and flyers inserted into the local newspaper.

NMC8: Public Notification

The Valparaiso City Utilities Water Reclamation Department (VCU-WRD) currently utilizes Paymentus, a computer application that allows notification to be sent by voice, e-mail or text message in the event of a CSO overflow.

NMC9: CSO Monitoring and Sampling Plan

CSO events are reported within the EKPCF's IDEM approved *CSO Monthly Monitoring Reports* (MMR) and *Discharge Monitoring Reports* (DMR). Water quality samples of the discharged treated combined sewage are collected in accordance with the facility's IDEM issued NPDES Permit.

7. Long-Term Control Plan Summary

The City of Valparaiso's Long-Term Control Plan (LTCP) was completed in December of 2011. This included five (5) major sewer separations and upgrades along with the construction and completion a disinfection facility as part of the WWTF to treat CSO overflows. It was noted that the LTCP could reduce CSO events by 50%.