

2021 IDDE Screening

Scope of Services:

Project Background

The City of West Allis operates its municipal separate storm sewer system (MS4) under a WPDES municipal storm water discharge permit from the Wisconsin Department of Natural Resources (WDNR), often referred to as a NR 216 Permit. The permit allows discharges of storm water from all portions of the City of West Allis' MS4. Several conditions and compliance items are outlined in the Permit and include specific dates for submittal.

Scope of Services

1. Annual IDDE Field Screening

1.1 Initial Field Screening of Outfalls

Conduct a single field screening at 11 major outfalls in the City. Where flow is observed, provide additional information on the Visual Inspection Form including chemical testing on grab samples using portable test kits to identify the presence and level of chlorine, phenols, copper, ammonia, and detergents. The level of effort assumes over half (6) of the outfalls will have dry weather flows present at the time of screening that require grab samples and field testing.

If an outfall tests positive for one (1) or more parameters, the field crew will test locations upstream. The goal is to continue sampling upstream of the outfall to isolate the pollutant(s) of interest and dry weather flow to a single location. If the pollutant(s) of interest appears to be from a diffuse source, test data results will be reviewed for patterning prior to taking any additional steps. The scope of services assumes up to 6 follow-up field screening locations.

If a drainage system requires follow-up screening and the field screening results in isolating the pollutant(s) to a single pipe or ditch segment, the field crew will conduct a "windshield survey" of the surrounding area. The survey includes photographing the surrounding area including buildings and other items of interest. Other items of interest can include, but are not limited to, outdoor storage areas, staining, or other potential signs of illicit discharges or dumping. No internal entry of any home or business is included in this effort. For the purposes of estimating the level of effort for this task, it is assumed that each basin where a follow-up investigation is performed will be investigated further via a windshield survey.

If the results of any windshield survey or follow-up investigation reveal an illicit connection or discharge that needs immediate attention, the results will be shared with City staff with a discussion of potential sources and recommended next steps.

IDDE Follow-up Levels

pH < 6.0 or pH > 9.0

Chlorine > 0.1 mg/L

Detergents > 0.50 mg/L

Phenols > 0.0 mg/L

Copper > 0.1 mg/L

Ammonia > 0.1 mg/L

1.2 Report

Results will be summarized in a format acceptable for inclusion in the City's annual NR 216 report. A draft of the report will be provided to the City for review.

AECOM will communicate with the City to review the results of the field screening. Outfalls where flow was observed, and chemical testing indicates potential discharges will be focused on. The decision to conduct any additional follow-up investigations will be based on the results of discussions with the City and, if necessary, after consultation with the WDNR.

2.0 Additional IDDE Investigations

2.1 Initial Screening Follow-Up Investigations

The goal of this task is to set aside additional effort to continue the investigation of outfalls that were found to have a potential illicit discharge during the initial field screening. Outfall results can vary based on previous weather conditions, time of year, and possible intermittent flows. This makes it possible for skewed/unclear tests results during an initial outfall visit and sometimes a site needs to be revisited to get a clear picture of the outfall conditions.

In addition, if an outfall was active during the previous year's screening and dry during the initial site visit, field crews may revisit the outfalls or conduct spot checks in upstream reaches to confirm the results of the initial investigation.

Any additional follow-up investigative efforts will be documented for inclusion in the final report. This scope assumes up to four outfalls will need additional investigation.

2.2 On-Call Screening Investigations

Provide additional on-call services related to the City of West Allis' IDDE inspections as requested by City Staff on an as needed basis. This scope of services assumes at least 2 miscellaneous on-call IDDE investigation will be performed.

Cost Estimate

The following is the estimated cost to complete the scope of services as presented.

Task 1 – Annual IDDE Field Screening	\$10,200
Task 2 – Additional IDDE Investigations	\$2,700
Total	\$12,900

Schedule:

AECOM and CLIENT both acknowledge this schedule may be impacted and delayed by travel restrictions and/or other attempts to protect workers and limit the transmission of the COVID-19 virus.

The project will begin upon receiving a signed agreement and notice to proceed on the project. Dry weather screening should be conducted after approximately 48 hours without precipitation. A draft report will be provided to the City by December 31, 2021 and a final report by February 28, 2022.

Deliverables:

Two (2) hard copies and one electronic PDF copy of the final report will be provided to the City.