

APPENDIX F: EXISTING ILLICIT DISCHARGE ORDINANCE

IDDE Plan

City of Bixby, OK



Purpose

OKR04 Part IV.C.3.a(2) requires the MS4 to develop a Dry Weather Field Screening (DWFS) Plan. Item (c) of this passage requires the MS4 to conduct “tracing the source” inspections. OKR04 Part IV.C.3.a(5) requires development of a more general plan to detect and address non-stormwater discharges. All three of these requirements are based upon conducting field inspections to look for pollution and their sources, and to take actions to eliminate the pollutant discharges from these sources.

Introduction

The City of Bixby has determined that the following actions will satisfy the OKR04 requirements to have an effective Illicit Discharge Detection and Elimination (IDDE) program.

IDDE Plan

The IDDE Plan action items follow the OKR04 steps presented in OKR04 Part IV.C.3.a(2) items a – e.

a. Locating Priority Areas:

- (1) Examine maps of MS4 area to locate sites with high potential for pollutant discharges.
- (2) Delineate MS4 areas within each of the 303(d) watersheds, and identify high priority areas that have sources most likely to cause or have the reasonable potential to contribute the 303(d) pollutants of concern to the 303(d) listed waterbody.

- (3) Collect data on pollutant spills that have occurred in the MS4 within the past 5 years.
- (4) Identify areas in which there have been sewer system bypasses within the past 5 years.
- (5) Identify areas having the oldest sewer system lines and appurtenances.
- (6) Identify industrial, commercial and residential areas having the greatest potential to discharge pollutants.
- (7) Compile results of any ambient sampling and DWFS inspections that indicate potential pollutants being discharged.
- (8) Compile all of these data, and generate a map and description of areas in the MS4 having the greatest potential to discharge pollutants.
- (9) Of the overall MS4 high priority areas, identify high priority areas specifically associated with 303(d) waterbodies.

b. On-Site Sewage Disposal Systems:

- (1) Compile an inventory of all on-site sewage disposal systems (OSSDS) in the MS4.
- (2) Assess the approximate age and condition of the clusters of OSSDS (e.g., those within a given residential subdivision).
- (3) Obtain records from ODEQ and county agencies on OSSDS inspections and enforcement actions regarding system bypasses or failures and pollution episodes.
- (4) Identify areas within the MS4 that have the highest potential for OSSDS failures and pollution discharges, and conduct inspections of individual systems and of the receiving streams for evidence of sewage bypasses from OSSDS.

c. Tracing the Source of Illicit Discharges:

- (1) Develop Dry Weather Field Screen (DWFS) Standard Operating Procedures (SOPs) documents that list the methods to be used by field crews to conduct the DWFS inspections. The DWFS SOPs will include steps for selecting DWFS sites, making visual observations at each site, using simple field test kits, and recording data on field forms.
- (2) The DWFS SOPs and program will include special attention to 303(d) waters as required in OKR04 Part III.A.1.d.
- (3) Conduct DWFS inspections at least year at all outfalls, with special emphasis on all high priority areas in 303(d) watersheds as required in OKR04 Part III.A.1.d.
- (4) Upon discovery or after receiving a report of a pollutant in the MS4 or in a receiving water, prepare a Work Order to begin administratively tracking progress of the investigation.
- (5) Perform an initial visual observation at the site of the reported pollution event.
- (6) If pollutants are not found, log out the Work Order noting the inspection results.
- (7) If Pollutants are found, determine if it will be possible to trace the source by looking for evidence of pollutants upstream or coming from a discharge pipe or channel.

- (8) If the pollutants appear to be due to an episodic, one-time discarding action with no traceability, note the findings in the Work Order and proceed with cleanup.
- (9) If the pollutant source(s) can be traced, conduct further inspections using visual indicators and simple field test kits as necessary to trace the pollutant source. Document your inspection results carefully.

d. Removing the Source:

- (1) If the source is found, present your findings to the owner of the pollution source and proceed with enforcement steps as provided in the local IDDE ordinances and codes.
- (2) Depending upon the severity of the pollution event, an emergency meeting with the owner may be needed. Consult ODEQ for assistance if needed.
- (3) Consult with ODEQ if faced with refusal by owners of the pollutant source or if additional technical expertise is needed to help document pollution severity or extent.
- (4) Upon completion of all inspection and enforcement actions, close Work Order.

e. Program Evaluation and Assessment:

- (1) The assessment of the IDDE Plan and program will be the assessment required for the Annual Report, with additional evaluation for all inspections and pollutant reduction actions taken within the high priority areas in 303(d) watersheds.
- (2) Factors and information to consider include numbers of IDDE Work Orders performed, successful completion of Work Orders, resolution of problems, estimated quantities of pollutants eliminated from the MS4, documentation of any public health problems or complaints, input from ODEQ and county health department, and input from citizens concerning success of program effectiveness or unresolved issues.
- (3) Using the factors cited above, perform an overall assessment of the program.
- (4) Identify program changes needed in the future to increase effectiveness.

Administrative Actions to Support the IDDE Program

To facilitate the successful implementation of the IDDE Plan defined above, the following additional administrative actions will be taken by the City of Bixby:

- a. Ensure that maps are effective by collecting map feature data during inspections to verify accuracy;
- b. Evaluate existing land uses in the MS4, and delineate high priority areas that have the greatest potential to discharge pollutants, with special consideration for 303(d) watersheds;
- c. Solicit and compile illicit discharge and pollution information from citizens, police and fire units, city public works crews, local businesses, other municipalities, non-profit organizations, volunteer stream monitors, students and educational institutions, construction contractors and workers, local building officials, floodplain administrator, and State and Federal agencies;

- d. Ensure that field and facility data are compiled in a manner that facilitates the inspection process (e.g. information about possible pollutants and/or sources are provided to MS4 inspectors in a timely fashion);
- e. Ensure that inspection results and field and laboratory data are properly documented with a level of quality assurance appropriate to the use of the data;
- f. Participate in INCOG's GCSA regional employee training on quality assurance, data management, use of field kits, analysis of chemical data and more;
- g. Implement procedures for helping with enforcement, including how to approach owners of potential sources for on-sight inspections, how to present field data to owners that confirms the source, and what procedures the owner must take to remove the discharge; and
- h. Periodically evaluate the inspection and enforcement program, and make modifications as necessary to improve program effectiveness.

Details of IDDE Inspections

The Dry Weather Field Screen (DWFS) and source tracking programs for potentially traceable sources will be described more fully in the City of Bixby's DWFS SOPs. The SOPs will include methods to conduct a visual inspection program performed by MS4 crews, which may include use of one or more field test kits for parameters that monitor the most likely type of stormwater pollution that is indicated (e.g. chlorine residual, pH, dissolved oxygen, conductivity, etc.). The visual inspection will describe and/or quantify the extent of pollution (e.g. floatables, excess algae growth, dead or stressed stream vegetation and organisms, color of water, odors, sediments, etc.). The DWFS SOPs will include special actions to address high priority areas identified in 303(d) watersheds.

If source tracking requires scientifically defensible data for possible litigation and/or enforcement action, then the City of Bixby will use either its properly trained field collection crews or contract professionals to conduct appropriate sampling and information gathering to locate sources and characterize pollution events. Outside agencies will be contacted, if necessary, to report potentially illegal discharges or to protect health, safety or the environment. All samples collected for transport to laboratories for analysis shall be collected under written Quality Assurance (QA) protocols, including use of Chain of Custody forms, appropriate sample bottles with labels, field forms describing sample collection sites and conditions, and proper sample preservation. All laboratory analyses will follow 40 CFR Part 136 methods.

Standard paper field forms and/or electronic field data recording devices (e.g. laptops, PDAs, GPS or Tablet PCs) will be used to make data collection systematic. Data will be entered and/or downloaded into computer databases for analysis, sharing and reporting. As needed, field data will be linked to MS4 map attributes. If requested to do so by ODEQ, certain monitoring data will be reported to ODEQ on ODEQ's Discharge Monitoring Report (DMR) forms.

Conclusion

The IDDE Plan action items follow the OKR04 steps presented in OKR04 Part IV.C.3.a(2) items a – e. The proceeding process has been determined by the City of Bixby to be the appropriate Illicit Discharge Detection and Elimination (IDDE) actions to satisfy the OKR04 requirements to have an effective IDDE program.