



U.S. Environmental Protection Agency
Region 9
Enforcement Division
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**MUNICIPAL SEPARATE STORM
SEWER SYSTEM (MS4)
COMPLIANCE INSPECTION**

**CITY OF LAKE ELSINORE
CALIFORNIA**

INSPECTION REPORT

**Inspection Dates:
September 29–30, 2014**

**Report Date:
July 21, 2015**

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1.0 Executive Summary

On September 29–30, 2014, the U.S. Environmental Protection Agency (EPA) and staff from PG Environmental, LLC, an EPA contractor, collectively referred to as the EPA Inspection Team, conducted an inspection of the City of Lake Elsinore’s (California) municipal separate storm sewer system (MS4) program.

The EPA Inspection Team reviewed documents, interviewed staff, and conducted field activities to review the City of Lake Elsinore’s (City’s) MS4 program. The inspection focused on three elements of the City’s MS4 program: (1) illicit connection/illicit discharge (IC/ID) as well as litter, debris, and trash control; (2) industrial facilities; and (3) new development (including significant redevelopment). At the conclusion of the inspection, the EPA Inspection Team discussed preliminary findings with City representatives.

Based on information gathered during the inspection, EPA identified the following potential Permit violations:

- The City identified dry-weather flow at the Pete Lehr Drive outfall in 2011 and in June 2014. Additionally, the EPA Inspection Team observed visible flow from the outfall during the inspection. The City had not investigated or eliminated the dry weather flow at the Pete Lehr Drive Outfall within sixty (60) calendar days, as required by Part IX.A of the Permit.
- The City failed to respond to all reports of IC/IDs within 24 hours as required by Part IX.B of the Permit.
- The City had not developed or submitted a schedule to implement systematic investigations of open channels and major outfalls within 18 months of Permit adoption as required by Part IX.E.b of the Permit.
- The City had not established risk-based inspection priorities for the industrial facilities in its jurisdiction as required by Part XI.C.1 of the Permit.
- The City was not conducting industrial facility inspections consistent with frequencies specified in Part XI.C.3 of the Permit.
- The City failed to require industrial facilities within its jurisdiction to implement source control and pollution prevention measures as required by Part XI.C.5 of the Permit.
- The City was relying on the expertise of environmental consulting firms as opposed to the detailed guidelines within Section 7.1 of the 2007 DAMP for determining the adequacy of proposed erosion and sediment control and post-construction BMPs for private new development and significant redevelopment projects, as required by Section XII.A.2 of the Permit.
- The City failed to ensure, through conditions of approval and/or as-built inspections, that private, post-construction BMPs were being operated and

maintained in such a manner as to minimize vector breeding as required by Section XII.K.1 and 2 of the Permit.

- The City was not using a WQMP checklist for review and approval of public projects, as required by Part XII.H.1 of the Permit.

EPA identified the following program deficiency:

- The City was using multiple databases to track IC/ID incident response, resulting in inconsistencies potentially impacting program implementation. The City should create a single database for IC/ID investigations that includes both the IC/ID complaints received and the IC/IDs investigated. The database should include all relevant dates (e.g. date complaint originated, date investigated, date resolved), location, contact information of parties involved, actions taken, and any other pertinent information.

2.0 Lake Elsinore Stormwater Program

On September 29–30, 2014, the EPA Inspection Team conducted an inspection of the City of Lake Elsinore’s (California) municipal separate storm sewer system (MS4) program. Discharges from the City’s MS4, the Riverside Flood Control District, Riverside County, and 15 other municipalities are regulated under *National Pollution Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region*, NPDES Permit No. CAS 618033, Order No. R8-2010-0033, effective on January 29, 2010 (the Permit). The current Permit is the City’s fourth NPDES MS4 permit.

The current Permit was issued to the Riverside County Flood Control and Water Conservation District (Principle Permittee) and the following Co-permittees: Beaumont, Calimesa, Canyon Lake, Corona, County of Riverside (County), Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Norco, Perris, Riverside, San Jacinto, and Wildomar. The Permit authorizes the Principle Permittee and Co-permittees to discharge or contribute to discharges of stormwater from Phase I MS4s into water bodies including Mill Creek Prado area, Chino Creek reach 1A, Chino Creek reach 1B, Temescal Creek, San Timoteo Wash, Little San Gorgonio, Santa Ana River reach 3, Santa Ana reach 4, Cucamonga Creek, San Jacinto River reach 1-4, Lake Elsinore, Canyon Lake, Strawberry Creek, Lake Hemet, Salt Creek, Poppet Creek, Indian Creek, and Bautista Creek.

At the time of the inspection, the *Riverside County Drainage Area Management Plan: Santa Ana and Santa Margarita Regions, April 2007 (DAMP)* was the most recently approved DAMP. Part II.A.5 of the Permit states, “With the adoption of this Order, the Permittees are required to implement the 2007 DAMP.”

City of Lake Elsinore Information

According to the 2010 U.S. Census, Lake Elsinore covers a total land area of approximately 36.21 square miles, and has a population of 51,821. It was established in 1888 and is located in western Riverside County at an elevation of 1,296 feet.

Approximately 16.2 percent of the City's area is surface water (~ 4.5 sq. miles), and the City has an average annual rainfall of 12.45 inches. Discharges from the City's MS4 flow into Temescal Creek and Lake Elsinore.

2.1 Program Areas Evaluated

The EPA Inspection Team obtained information through interviews with representatives from the City along with a series of site visits, record reviews, and field verification activities.

The inspection entailed an evaluation of the City's compliance with the following three stormwater management components of the Permit:

- Illicit connection/illicit discharge (IC/ID) as well as litter, debris, and trash control;
- Industrial facilities; and
- New development (including significant redevelopment).

The EPA Inspection Team did not evaluate all components of the City's MS4 program, and this inspection report should not be considered a comprehensive evaluation of all individual program elements.

3.0 Evaluation Findings

This section describes the findings for the sections of the MS4 Permit that were reviewed. Within each subsection, where applicable, EPA has identified recommendations for program improvement, program deficiencies, and potential permit violations. Program deficiencies are areas of concern that may prevent successful program implementation or areas that, unless action is taken, have the potential to result in noncompliance in the future.

The inspection findings are supported by interviews, observations, and photographic evidence gathered during the inspection, as well as documentation that may have been obtained before, during, or after the inspection. This inspection report does not attempt to comprehensively describe all aspects of the City's MS4 program or fully document all lines of questioning conducted during personnel interviews. The presentation of inspection findings in this report does not constitute a formal compliance determination or notice of violation; rather, it identifies areas of concern with Permit compliance. Additional inspection report materials, including an inspection schedule and sign-in sheet, are included in [Appendix A](#).

Multiple documents were referenced by the EPA Inspection Team during the inspection process and development of this report (e.g., the Permit, MS4 annual reports). In addition, the City provided the EPA Inspection Team with multiple documents during the inspection process. A list of these reference materials is included as [Appendix B](#). The documents identified in [Appendix B](#) have not been included in the submittal of this

inspection report. Copies of the materials are maintained by EPA Region 9 and can be made available upon request.

3.1 Illicit Connection/Illegal Discharge; Litter, Debris and Trash Control

Part IX of the Permit requires the City to: (1) continue to implement and improve routine inspection and monitoring and reporting programs for their MS4 facilities; (2) investigate and remove IC/ID in the specific Permit-listed timeframes; (3) control illegal dumping that may result in a discharge of pollutants to the MS4; (4) revise IC/ID programs to specify an inventory and map of MS4 facilities and outfalls, develop a schedule for systematic investigations of MS4 open channels and major outfalls, use field indicators to identify potentially illegal discharges, track illegal discharges to their sources, and educate the public about illegal discharges and pollution prevention where problems are found; and (5) maintain an updated database of IC/ID incident responses.

3.1.1 Illicit Connection and Illegal Discharge Routine Inspection and Monitoring

Part IX.A of the Permit requires the City to “implement and improve routine inspection and monitoring and reporting programs for their MS4 facilities.” The Environmental Coordinator stated that the City began using the MS4web™ Permit Manager software (MS4web database) as part of their stormwater monitoring system about a year ago. At the time of the inspection the software was being used to track IC/IDs, post-construction best management practices (BMPs), and MS4 outfalls.

The City’s Environmental Coordinator stated the City’s MS4 database contained information on 71 outfalls, but only 5 were owned and maintained by the City (Appendix D, Exhibit 1). The Environmental Coordinator provided completed Outfall Inspection Checklists for each of the five City-owned outfalls, all dated in June 2014 (Appendix D, Exhibit 2).

Part IX.A of the Permit states, “If routine inspections or Dry Season monitoring and reporting programs indicate IC/IDs, they must be investigated and eliminated or permitted within sixty (60) calendar days of receipt of notice by its staff or from a third party.”

City staff stated that the Environmental Coordinator performs routine inspections of outfalls and records the inspection results in the MS4web database. The Environmental Coordinator provided a printout from the MS4web database detailing information about the five City outfalls (Appendix D, Exhibit 3). The printout showed the most recent “date visited” for each outfall as 2011 (the 2014 outfall inspections had not yet been entered into the MS4 database) and indicated that the outfall on Pete Lehr Drive was flowing at the time of that inspection. The 2014 Outfall Inspection Checklist for the Pete Lehr Drive outfall also indicated that standing water was visible and that the area was “heavily vegetated” downstream of the outfall (Appendix D, Exhibit 2).

During the field verification activities, the EPA Inspection Team visited the Pete Lehr Drive outfall and noted that water was flowing from the outfall pipe to Lake Elsinore (Appendix C, Photos 1 and 2). The Environmental Coordinator stated at the time of the inspection that she had not identified the source of the flow. The EPA Inspection Team and City representatives attempted to trace the flow back to its source by observing up-gradient catch basins located near Lake Elsinore Diamond Stadium but were unable to identify the source (Appendix C, Photo 3 and 4).

Potential Permit Violation:

The City identified dry-weather flow at the Pete Lehr Drive outfall in 2011 and in June 2014. Additionally, the EPA Inspection Team observed visible flow from the outfall during the inspection. The City had not investigated or eliminated the dry weather flow at the Pete Lehr Drive Outfall within sixty (60) calendar days, as required by Part IX.A of the Permit.

Following the inspection, the City confirmed that dry-weather flows at the Pete Lehr Drive outfall are attributed to a permitted connection (i.e. sump) to its MS4 at Diamond Stadium. The City's follow-up investigation confirmed that the sump discharges flow from both the "working/storage" areas of the stadium and the playing field. Given the likely use of nutrients among other potential pollutants for turf management at the Stadium, the City should expand its investigation of this discharge to include sampling and analysis for pollutants of concern, as required by Section IX.E.c of the Permit.

3.1.2 Illicit Connection and Illegal Discharge Investigation and Elimination

Part IX.B of the Permit requires the City upon being put on notice by staff or a third party to "immediately (within 24 hours of receipt of notice by its staff or from a third Party) investigate all spills, leaks, and/or other illegal discharges to the MS4." The Environmental Coordinator stated that the City stormwater system has connections with County Flood, unincorporated Riverside County, Santa Ana Watershed Pollution Authority (SAWPA), and Caltrans; the entity that takes the lead on IC/ID investigations varies depending on who owns the discharge point. City staff explained that all parties potentially impacted by an IC/ID are privy to all communications and investigations. At the time of the inspection the City did not have formal SOPs or memorandums of understanding (MOUs) describing communication protocols among the different entities.

Recommendation for Improvement:

EPA recommends the City develop SOPs for communications with the other Co-Permittees on how to respond to and investigate IC/IDs.

During the inspection, the Environmental Coordinator explained how she addresses reports of IC/IDs and provided the EPA Inspection Team with a hardcopy of an IC/ID Activity Log which was maintained as a spreadsheet database (Appendix D, Exhibit 4). She explained that the City attempts to investigate an IC/ID complaint within three days of receiving it, but "if something is flowing" she goes out within 24 hours to investigate the location. At the time of the inspection, the City staff stated public complaints were

received either by phone, Web site complaint form, or direct e-mail. City representatives stated that the City also advertises the County Flood IC/ID hotline and that if County Flood receives a complaint that falls under the City's jurisdiction through the hotline, they call the Environmental Coordinator directly.

EPA reviewed the City's IC/ID Activity Log and found that it did not include complete dates for all IC/ID investigations, so it was unclear how long it took the City to respond to IC/ID complaints (Appendix D, Exhibit 4).

Potential Permit Violation:

The City failed to respond to all reports of IC/IDs within 24 hours as required by Part IX.B of the Permit.

3.1.3 Illicit Connection, Illegal Discharge Investigation Schedule, Tracking, and Training

Part IX.E.b of the Permit requires the City to develop a schedule to be submitted within 18 months of Permit adoption to conduct and implement systematic investigations of MS4 open channels and Major Outfalls. The Environmental Coordinator explained that she does not have a set schedule for investigating MS4 open channels or major outfalls; however, she tries to inspect them once each dry season.

Potential Permit Violation:

The City had not developed or submitted a schedule to implement systematic investigations of open channels and major outfalls within 18 months of Permit adoption as required by Part IX.E.b of the Permit.

Part IX.H of the Permit requires that the City maintain a database summarizing IC/ID incident responses (including IC/IDs detected as part of the field monitoring activities). This information shall be updated on an ongoing basis and submitted with the Annual Report.

City staff provided the EPA Inspection Team with an example of an entry of an IC/ID into the MS4web database (Appendix D, Exhibit 5). The form included the location and date of the investigation and the date that the issue was resolved. The information in the MS4web database was also located in the City's Microsoft Excel database, but the information about the dry-weather flow at Pete Lehr Drive was not in the Microsoft Excel database.

Program Deficiency:

The City was using multiple databases to track IC/ID incident response, resulting in inconsistencies potentially impacting program implementation. The City should create a single database for IC/ID investigations that includes both the IC/ID complaints received and the IC/IDs investigated. The database should include all relevant dates (e.g. date complaint originated, date investigated, date resolved), location, contact information of parties involved, actions taken, and any other pertinent information.

3.2 Industrial Facilities

Part XI.C of the Permit details industrial facility inspection requirements, which include requiring the City to: (1) establish priorities for inspections; (2) conduct inspections in compliance with its ordinances, permits and the MS4 Permit; (3) perform inspections on a priority based schedule; (4) continue to identify industrial facilities within its jurisdiction and add them to its database; and (5) require industrial facilities to implement source control and pollution prevention measures consistent with Section 8 of the DAMP.

3.2.1 Establish Priorities for Industrial Facility Inspections

Part XI.C.1 of the Permit requires the City to establish priorities for inspection as high, medium, or low threat to water quality, and to continually evaluate these industrial facilities on such factors as type of industrial activities (i.e., SIC codes), materials or wastes used or stored outside, pollutant discharge potential, compliance history, facility size, proximity and sensitivity of receiving waters and any other relevant factors described in Section 8 of the DAMP.

The Environmental Coordinator explained that the City had not yet established an industrial facility prioritization scheme. City staff provided the EPA Inspection Team with completed industrial inspection forms ([Appendix D, Exhibit 6](#)). The bottom section of the form includes checkboxes to indicate an overall rating, *facility priority*, and if a “Notice of Correction” was issued. An additional document titled “City of Lake Elsinore Areawide Stormwater Management Program Commercial/Industrial Facility Risk-based Inspection Priority Assessment Form” was provided to the EPA Inspection Team ([Appendix D, Exhibit 7](#)). At the time of the inspection, the City had just begun the process of establishing risk-based inspection priorities for industrial facilities within its jurisdiction through use of above described forms.

Potential Permit Violation:

The City had not established risk-based inspection priorities for the industrial facilities in its jurisdiction as required by Part XI.C.1 of the Permit.

3.2.2 Perform Priority-based Inspections of Industrial Facilities

Part XI.C.3 of the Permit requires the City to inspect all high priority Industrial Facilities at least once a year, all medium priority Industrial Facilities at least once every two years, and all low priority Industrial Facilities at least once during the term of the Permit.

City representatives stated that only a limited number of industrial facility inspections were conducted annually by City staff prior to the establishment of a contract with a private consulting firm, Lynn Merrill (Consultant), to assist with inspecting industrial facilities within the City’s jurisdiction. The Consultant reported that they started working for the City approximately six weeks prior to the EPA inspection. The Consultant had been performing industrial inspections for approximately one month and stated that they had completed 55 inspections in that timeframe.

Potential Permit Violation:

The City was not conducting industrial facility inspections consistent with frequencies specified in Part XI.C.3 of the Permit.

3.2.3 Implement Source Control for Industrial Facilities

Part XI.C.5 of the Permit requires the City to require Industrial Facilities to implement source control and pollution prevention measures consistent with the requirements of Section 8 of the DAMP.

The Environmental Coordinator provided the EPA Inspection Team with a copy of the City's *Chapter 14.08 Stormwater/Urban Runoff Management and Discharge Controls* (Ordinance) (Appendix D, Exhibit 9) which requires the owner or operator of a commercial or industrial establishment to provide reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses.

City staff stated they had not inspected all of the industrial facilities in its jurisdiction, and therefore had not required all subject facilities to establish source control and pollution prevention measures.

Potential Permit Violation:

The City failed to require industrial facilities within its jurisdiction to implement source control and pollution prevention measures as required by Part XI.C.5 of the Permit.

3.3 New Development (including significant redevelopment)

Part XII of the Permit requires, among other things, the City to: (1) ensure that all New Development and Significant Redevelopment projects plans it approves implement BMPs identified in Section 7.1 of the DAMP; (2) require project applicants to implement appropriate post-construction BMPs, source control BMPs, and treatment control BMPs, and identify their locations and long-term maintenance responsibilities; and (3) require applicants to minimize the short and long-term adverse impacts on receiving water quality from New Development and Significant Redevelopment projects.

3.3.1 New Development and Redevelopment Permit Approval Process

Part XII.A.2 of the Permit requires the City continue to implement BMPs identified in Section 7.1 of the DAMP (i.e., stabilize exposed soils, protect steep slopes, protect waterways, phase construction, preserve site conditions) by requiring inclusion of these BMPs or other equivalent or better performing BMPs in all New Development and Redevelopment project plans it approves.

Part XII.A.8 of the Permit requires the City to require New Development and Redevelopment project applicants to minimize the short and long-term adverse impacts on receiving water quality from proposed projects. Part XII.A.8 of the Permit further requires the City to review project-specific WQMPs to ensure adequate consideration of hydrologic conditions of concern (HCOC) and long-term BMP operation and

maintenance (O&M) mechanisms are in place prior to project closure or issuance of certificates of occupancy.

City representatives explained the approval process for both private and public New Development and Redevelopment projects. Specific to private projects, the approval process starts with the submittal of an application and site plans to the Planning Department. The Planning Department reviews and comments on the plans before forwarding to the City's design committee. During the design committee review, the City utilizes environmental sector consulting firms to review site plans and verify the appropriateness of proposed erosion and sediment control, and post-construction BMPs. The City representative explained that "institutional knowledge" is used to determine the appropriateness of proposed erosion and sediment control and post-construction BMPs, while a WQMP Review Checklist (Appendix D, Exhibit 10) is used to ensure the project addresses all required LID/Hydromodification design criteria, and long-term O&M requirements.

The Environmental Coordinator explained that both private and public construction projects and associated post-construction BMPs are recorded in the MS4web database (Appendix D, Exhibit 11). City representatives stated that contractors had been hired to conduct as-built project approvals, but that the City was still "months out" from reviewing and approving the as-built backlog. The Environmental Coordinator provided the EPA Inspection Team with a digital copy of the City's inventory of post-construction BMPs generated from the MS4web database (Appendix D, Exhibit 11).

City representatives stated that once construction of a New Development or Significant Redevelopment project has been completed, City staff verify that the "as-built" BMP matches the approved plans and the BMP is functioning properly prior to approving the project for occupancy or use. The Environmental Coordinator stated that she typically verifies that post-construction BMPs are functioning properly by inspecting the BMP during wet weather conditions.

The City representative stated that all private, post-construction BMP O&M requirements are approved by the City attorney and recorded on the property deed. The Environmental Coordinator provided an example of an approved WQMP and O&M agreement for the recently constructed Family Dollar marketplace (Appendix D, Exhibit 12). During field verification activities, the EPA Inspection Team visited the Family Dollar site. While onsite, the EPA Inspection Team observed that standing water containing mosquito larva in the infiltration basin located on the front of the property (Appendix C, Photos 8 and 9). The City representative stated there had not been a rain event in approximately two weeks. The Environmental Coordinator stated that the property owner is responsible for the maintenance of the post-construction BMPs, including resolving the standing water issue.

Potential Permit Violation:

The City was relying on the expertise of environmental consulting firms as opposed to the detailed guidelines within Section 7.1 of the 2007 DAMP for determining the adequacy of

proposed erosion and sediment control and post-construction BMPs for private new development and significant redevelopment projects, as required by Section XII.A.2 of the Permit.

Potential Permit Violation:

The City failed to ensure, through conditions of approval and/or as-built inspections, that private, post-construction BMPs were being operated and maintained in such a manner as to minimize vector breeding as required by Section XII.K.1 and 2 of the Permit.

Part XII.H.1 of the Permit requires the City to utilize a mechanism for review and approval of WQMPs including a checklist that incorporates the minimum requirements of the model WQMP. The Environmental Coordinator stated that the public project approval process does not use the WQMP checklist or have the same post-construction O&M requirement as private projects. City representatives stated that the O&M plan for public projects only requires the City “maintain” the post-construction BMPs, but this requirement is not documented through a deed restriction.

Potential Permit Violation:

The City was not using a WQMP checklist for review and approval of WQMPs for public projects as required by Part XII.H.1 of the Permit.

Recommendations for Improvement:

The City should include long-term maintenance requirements for post-construction BMPs in all O&M agreements for public projects.