UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

May 30, 2012

Mr. Dennis Ahlen
City of Alhambra
111 South First Street
Alhambra, California 91801

Dear Mr. Ahlen:

Enclosed is the May 30, 2012, report regarding EPA's Clean Water Act compliance inspection of the City of Alhambra's sewer collection system conducted on December 20, 2011. Attached to the report is a copy of the Inspection Form completed by the City and submitted to EPA during the inspection. EPA completed the inspection participants section. The main findings of EPA's compliance inspection are summarized below:

- EPA recommends that the City enhance its efforts to eliminate sewage overflows from its collections system.

- EPA recommends that the City improve its documentation and reporting of sewage overflows.

Please review this report and if any factual disputes are identified, please contact EPA within 14 calendar days of receipt of this letter. Please provide a response to each of the recommendations in the report within 30 calendar days of receipt of this letter. Thank you for your cooperation and the cooperation of your staff during the inspection. If you have any questions, please feel free to contact JoAnn Cola of my staff by e-mail at cola.joann@epa.gov.

Sincerely,

Ken Greenberg, Chief
Clean Water Act Compliance Office

Enclosure

cc: Hugh Marley, Los Angeles Regional Water Quality Control Board
Julie Berrey, State Water Resources ControlBoard

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION 9

CLEAN WATER ACT COMPLIANCE OFFICE

NPDES COMPLIANCE EVALUATION INSPECTION REPORT

Utility Name: City of Alhambra Sewage Collection System

NPDES Permit Number: N/A

Date of Inspection: December 20, 2011

Inspection Participants:

Inspector	Agency
JoAnn Cola	Environmental Protection Agency
Julie Berrey	State of California Water Board
Andrew Choi	Los Angeles Regional Water Board
Chris Lopez	Los Angeles Regional Water Board
Hugh Marley	Los Angeles Regional Water Board
Jose Morales	Los Angeles Regional Water Board

Utility Personnel	Title
Martin Ray	Deputy Director of Utilities
Dennis Ahlen	General Manager of Utilities
Ron Capotosto	Production Supervisor
Claudine Meeker	Deputy Director of Utilities

Report Prepared By: JoAnn Cola, Environmental Engineer

Date Prepared: May 30, 2012

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding (i.e., PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac Type
1 W	2 5 / 3	12 / / / 2 2 0 17	18 8	19 J	20

Remarks

21

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
67 0 / 1 0 69	70	71	72	73 74 75 80

Section B: Facility Data

Name and Location of Facility Inspected (For Industrial users discharging to POTW, also include POTW name and NPDES permit number)	Entry Time/Date	Permit Effective Date
CITY OF ALHAMBRA 111 SOUTH FIRST STREET ALHAMBRA, CALIFORNIA 91801	0900 12/20/2011	
	Exit Time/Date 1630 12/20/2011	Permit Expiration Date

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

MARTIN RAY, DEPUTY DIRECTOR OF UTILITIES 626-570-3280(P) 626-281-9023(F)

CLAUDINE MEEKER, DEPUTY DIRECTOR OF UTILITIES 626-570-5080(P) 626-282-5833(F)

RON CARTOSTO, PRODUCTION MANAGER 626-570-3286(P) 626-281-0823(F)

DENNIS AHLEN, GENERAL MANAGER OF UTILITIES, 626-570-3274(P) 626-281-9023(F)

Other Facility Data (e.g., SIC NAICS, and other descriptive information)

Name, Address of Responsible Official/Title/Phone and Fax Number

DENNIS AHLEN, GENERAL MANAGER OF UTILITIES
CITY OF ALHAMBRA
111 SOUTH FIRST ST.
ALHAMBRA, CA 91801 626-570-3274(P); 626-281-9023(F)

Contacted ☑ Yes ☐ No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

☐ Permit	☐ Self-Monitoring Program	☐ Pretreatment	☐ MS4
☐ Records/Reports	☐ Compliance Schedules	☐ Pollution Prevention	
☐ Facility Site Review	☐ Laboratory	☐ Storm Water	
☐ Effluent/Receiving Waters	☐ Operations & Maintenance	☐ Combined Sewer Overflow	
☐ Flow Measurement	☐ Sludge Handling/Disposal	☑ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description
A 0 0 2 0	138,000 gallon SSO 10/20/2011
A 0 0 2 0	6,750 gallon SSO 3/21/2011
A 0 0 2 0	55,000 gallon SSO 2/3/2005

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
	US EPA REGION 9 415-972-3578(P) 415-947-3545(F)	5/30/2012

Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Numbers	Date
	Manager, CWA Compliance Office	5/30/12

EPA Form 3560-3 (Rev 4-05) Previous editions are obsolete.

INSTRUCTIONS

Section A: National Data System Coding *(i.e., PCS)*

Column 1: Transaction Code: Use N, C, or D for New, Change, or Delete. All inspections will be *new* unless there is an error in the data entered.

Columns 3-11: NPDES Permit No. Enter the facility's NPDES permit number - third character in permit number indicates permit type for U=unpermitted, G=general permit, etc.. *(Use the Remarks columns to record the State permit number, if necessary.)*

Columns 12-17: Inspection Date. Insert the date entry was made into the facility. Use the year/month/day format (e.g., 04/10/01 = October 01, 2004).

Column 18: Inspection Type*. Use one of the codes listed below to describe the type of inspection:

A	Performance Audit	U	IU Inspection with Pretreatment Audit	!	Pretreatment Compliance (Oversight)
B	Compliance Biomonitoring	X	Toxics Inspection	@	Follow-up (enforcement)
C	Compliance Evaluation (non-sampling)	Z	Sludge - Biosolids	[	Storm Water-Construction-Sampling
D	Diagnostic	#	Combined Sewer Overflow-Sampling	)	Storm Water-Construction-Non-Sampling
F	Pretreatment (Follow-up)	$	Combined Sewer Overflow-Non-Sampling	:	Storm Water-Non-Construction-Sampling
G	Pretreatment (Audit)	+	Sanitary Sewer Overflow-Sampling	~	Storm Water-Non-Construction-Non-Sampling
I	Industrial User (IU) Inspection	&	Sanitary Sewer Overflow-Non-Sampling	<	Storm Water-MS4-Sampling
J	Complaints	\	CAFO-Sampling	-	Storm Water-MS4-Non-Sampling
M	Multimedia	=	CAFO-Non-Sampling	>	Storm Water-MS4-Audit
N	Spill	2	IU Sampling Inspection		
O	Compliance Evaluation (Oversight)	3	IU Non-Sampling Inspection		
P	Pretreatment Compliance Inspection	4	IU Toxics Inspection		
R	Reconnaissance	5	IU Sampling Inspection with Pretreatment		
S	Compliance Sampling	6	IU Non-Sampling Inspection with Pretreatment		
		7	IU Toxics with Pretreatment		

Column 19: Inspector Code. Use one of the codes listed below to describe the *lead agency* in the inspection.

A — State (Contractor)	O — Other Inspectors, Federal/EPA (Specify in Remarks columns)
B — EPA (Contractor)	P — Other Inspectors, State (Specify in Remarks columns)
E — Corps of Engineers	R — EPA Regional Inspector
J — Joint EPA/State Inspectors—EPA Lead	S — State Inspector
L — Local Health Department (State)	T — Joint State/EPA Inspectors—State lead
N — NEIC Inspectors	

Column 20: Facility Type. Use one of the codes below to describe the facility.

1 — Municipal. Publicly Owned Treatment Works (POTWs) with 1987 Standard Industrial Code (SIC) 4952.
2 — Industrial. Other than municipal, agricultural, and Federal facilities.
3 — Agricultural. Facilities classified with 1987 SIC 0111 to 0971.
4 — Federal. Facilities identified as Federal by the EPA Regional Office.
5 — Oil & Gas. Facilities classified with 1987 SIC 1311 to 1389.

Columns 21-66: Remarks. These columns are reserved for remarks at the discretion of the Region.

Columns 67-69: Inspection Work Days. Estimate the total work effort (to the nearest 0.1 work day), up to 99.9 days, that were used to complete the inspection and submit a QA reviewed report of findings. This estimate includes the accumulative effort of all participating inspectors; any effort for laboratory analyses, testing, and remote sensing; and the billed payroll time for travel and pre and post inspection preparation. This estimate does not require detailed documentation.

Column 70: Facility Evaluation Rating. Use information gathered during the inspection (regardless of inspection type) to evaluate the quality of the facility self-monitoring program. Grade the program using a scale of 1 to 5 with a score of 5 being used for very reliable self-monitoring programs, 3 being satisfactory, and 1 being used for very unreliable programs.

Column 71: Biomonitoring Information. Enter D for static testing. Enter F for flow through testing. Enter N for no biomonitoring.

Column 72: Quality Assurance Data Inspection. Enter Q if the inspection was conducted as followup on quality assurance sample results. Enter N otherwise.

Columns 73-80: These columns are reserved for regionally defined information.

Section B: Facility Data

This section is self-explanatory except for "Other Facility Data," which may include new information not in the permit or PCS (e.g., new outfalls, names of receiving waters, new ownership, other updates to the record, SIC/NAICS Codes, Latitude/Longitude).

Section C: Areas Evaluated During Inspection

Check only those areas evaluated by marking the appropriate box. Use Section D and additional sheets as necessary. Support the findings, as necessary, in a brief narrative report. Use the headings given on the report form (e.g., Permit, Records/Reports) when discussing the areas evaluated during the inspection.

Section D: Summary of Findings/Comments

Briefly summarize the inspection findings. This summary should abstract the pertinent inspection findings, not replace the narrative report. Reference a list of attachments, such as completed checklists taken from the NPDES Compliance Inspection Manuals and pretreatment guidance documents, including effluent data when sampling has been done. Use extra sheets as necessary.

*Footnote: In addition to the inspection types listed above under column 18, a state may continue to use the following wet weather and CAFO inspection types until the state is brought into ICIS-NPDES: K: CAFO, V: SSO, Y: CSO, W: Storm Water 9: MS4. States may also use the new wet weather, CAFO and MS4 inspections types shown in column 18 of this form. The EPA regions are required to use the new wet weather, CAFO, and MS4 inspection types for inspections with an inspection date (DTIN) on or after July 1, 2005.

Inspection Summary

1. **Introduction.** On December 20, 2011, staff from EPA Region 9, the Los Angeles Regional Board, and the State Water Board inspected the wastewater collection system owned and operated by the City of Alhambra. The purpose of the inspection was to determine compliance with the Clean Water Act. Alhambra is a city of 7.5 square miles located approximately 5 miles northeast of Los Angeles with a population of 83,000. Alhambra's sewage collection system consists of 130 miles of pipe with 7 pump stations and 3 siphons. In addition to flow generated within the City of Alhambra, a small amount of flow estimated by the City to be approximately 20 to 50 gallons per minute, enters the system from the City of Monterey Park into 2 of Alhambra's lift stations. Alhambra is a satellite collection system tributary to Los Angeles County Sanitary District 16. Information provided by Alhambra representatives is summarized in the Inspection Form, above. This summary provides highlights of EPA's inspection findings.

2. **Regulatory Requirements.** Discharges to waters of the United States without a permit are prohibited by Section 301(a) of the Clean Water Act. The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, DWQ No. 2006-0003, states that any spill that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

3. **Occurrence of SSOs.** Discharges to waters of the United States without a permit are prohibited by Section 301(a) of the Clean Water Act. In addition, Part C.1 Prohibitions of the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ, states that any spill that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

   During the 5-year period between January 1, 2007 and December 20, 2011, 18 Sanitary Sewer Overflows ("SSOs") occurred due to blockages or problems originating in City-owned assets, according to both the California Integrated Water Quality System ("CIWQS") database and the inspection questionnaire that was filled out by the City of Alhambra and submitted following the inspection. Of these, 12 SSOs were reported to have reached surface waters. The City owns and is responsible for the operation and maintenance of 130 miles of pipe.

   Of the SSOs reported to the CIWQS database by the City, an SSO due to pipe failure accounted for approximately 60% of the spill volume; however, most of the SSOs were due either to pump stations failure; Fats, Oils, and Grease ("FOG"); or root intrusion.

The City reported that all of its system is cleaned annually, and that hot spots due to roots and FOG are cleaned twice per year. According to City staff, the number of hot spots was reduced from 311 in 2007 to 3 due to improvements in the cleaning program.

Order No. 2006-0003-DWQ requires the SSMP to include regular visual inspection of the system in the maintenance program. Section II of the City's Sewer System Management plan ("SSMP") states that CCTV is the primary method of inspection for condition assessment, should be used to update the CIP, and to modify the hot spot list. The City's Rehabilitation Report recommends routine CCTV inspection every ten years, with problem locations inspected more frequently. The City stated to the inspection team that although it is in the process of procuring CCTV equipment, it currently has no CCTV equipment of its own and contracts out CCTV work. It has no program in place for routine CCTV, and does not CCTV following SSOs. Despite improvements in the sewer cleaning program, the number of SSOs during 2011 increased over the previous several years.

Recommendation: The City is required by Order No. 2006-0003-DWQ to take all feasible steps to eliminate SSOs; therefore, it should continue increasing its efforts to reduce SSOs. It should intensify its focus on pump stations, FOG, and root control programs. The City should follow the recommendations of its Rehabilitation Report and continue its plan to procure CCTV equipment, thus enabling it to CCTV following SSOs and to perform routine CCTV inspection.

4. **Documentation of SSOs.** The State Water Resources Control Board's Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements requires Alhambra to develop and implement an SSMP, including a Sewer System Overflow Response Plan ("SSORP"). Monitoring and Reporting Program No. 2006-0003-DWQ establishes requirements for monitoring, recordkeeping, and reporting. Paragraph B of the Monitoring Program requires that the documentation related to SSOs must be maintained by the Enrollee for a period of five years. The required documents include copies of the report submitted to California Integrated Water Quality System ("CIWQS"), logs of SSO calls, service call records, SSO records, complaints, and maintenance records.

During the inspection, City staff stated that it maintains sheets for all calls regarding sewage discharges. Calls received by the Police Department, which includes all calls received after normal business hours, are not limited to sewer calls. These dispatch logs are not accessible by the Utilities department staff. The City staff said that it maintains a spreadsheet to record discharges by fiscal year. The City records the time of the first call as the spill start time but told the inspection team that it does no further investigation to determine the actual time the spill began. A review of field reports submitted by the City following the inspection revealed that in most cases, the spill start time was reported as the time the call was received; but in some cases, the time the call was received was the

same time the response crew arrived at the spill location. Although the City told inspectors that it can attach photographs to the field reports, none of the field reports submitted to EPA after the inspection contained photographs.

The City explained to the inspection team that it uses the "San Diego charts" when estimating spill volume. In fact, the City's SSORP provides both a copy of the City of San Diego's "Reference Sheet for Estimating Sewer Spills from Overflowing Manholes" and California Water Environment Association ("CWEA's") "Sample Templates for SSO Volume Estimation". The San Diego chart depicts several overflowing manholes with approximate flow rates for each. The CWEA's tables determine an estimate of flow from manholes when manhole cover size and height of the outflow are known. Both the San Diego chart and the CWEA tables provide a means for estimating flow rate from a spilling manhole; but to use either to estimate total spill volume, one must also have an accurate estimate of the spill duration. The City's SSO Field Incident Report form contains a field for SSO volume, but no fields are included for entering the observed flow rate, manhole size, height of the outflow observed, or for making calculations or sketches. The field reports provide no information regarding whether either the tables or chart were used, or describe how the volume was actually calculated. City staff told inspectors that the total volume is most often estimated visually, meaning that volume estimation is essentially a guess.

Recommendation: To comply with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, the City should make all efforts to improve the completeness and accuracy of its documentation of SSOs. Standard procedures should be established for preparing complete and accurate documentation of SSOs, beginning with the logging of the initial call from the public until the final spill report is submitted to CIWQS. When possible, response crews should follow up to reasonably determine the actual time the SSO began. The City should also consider preparing spill response documentation kits to be maintained in its service vehicles, including tools to aid in estimating SSO volume, including digital cameras. All staff that responds to SSOs should receive additional training in preparing and maintaining SSO documentation.

5. **Reporting of SSOs.** According to the State Water Resources Control Board's Order No. 2006-0003-DWQ Statewide General Waste Discharge Requirements, the City of Alhambra is required to report all SSOs to the State's CIWQS database. During the inspection, City staff told the inspection team that they define any discharge from the collection system to be an SSO. During review of field reports, one SSO was discovered that appears to not have been reported to CIWQS. This SSO occurred on April 4, 2011 at 200 West Main Street. According to the field report, the spill was caused by extensive FOG accumulation in the City's main, and seemed to have been mostly contained in the basement of the building, with some flow in a parking lot and alley next to the building. During the interview, City staff stated to the inspection team that it does not report

"basement backups" to CIWQS. "Basement backups" are those spills that may occur on private property but are due to blockages in city-owned pipe.

On October 20, 2011, a 423,000 gallon SSO occurred at the intersection of Mission Road at San Pasqual Avenue ("San Pasqual SSO"). Of the 423,000 gallons spilled from the failed line on Mission Road into the San Pasqual sewer line, only the 138,000 gallons that subsequently entered a storm drain were reported to the State's CIWQS database for the "estimated spill volume." The CIWQS SSO Report further states 138,000 gallons as the "estimated volume of spill recovered" and 97,000 gallons as the "estimated volume (greater than 0) of spill that reached surface water, drainage channel, or not recovered from separate storm drain." The City should have reported the estimated spill volume as 423,000 gallons. As a result, the spill volume reported to CIWQS and the spill volume that the City entered on page 5 of the Inspection Form are both incorrect. During the inspection, the City explained that the spill volume recovered was based on cleanup efforts performed downstream of the storm drain outfall.

Recommendation: The City must report all SSOs, including "basement backups", as required by the State's Monitoring and Reporting Program No. 2006-0003-DWQ. The City should provide EPA and the State with the reasons any SSOs were not reported to CIWQS and report all missing SSO data to CIWQS, as appropriate. The City must also correctly report the total SSO spill volumes to CIWQS. To better explain the spill volume estimates included in CIWQS SSO Reports, the City should consider including detailed information on volumes in the "explanation of final spill destination" and "explanation of spill response activities" boxes.

6. **Repeat SSO Locations / Pump Stations.** Section D of Order No. 2006-0003-DWQ requires Alhambra to take all steps feasible to eliminate SSOs. A review of the SSO data submitted by Alhambra following the inspection reveals three locations where there have been repeat spills over the past five years: Westmont Street (Sewer Plant #4), Balzac Street (Sewer Plant #3), and Sarazen Drive (Sewer Plant #7). These three pump station locations account for 7 of the 18 SSOs.

   Spills from pump stations are generally preventable when the stations are well maintained. According to the field reports provided by the City, three spills appear to have been caused by power outages, and three were caused by pump station electrical failures; one was reported caused by rags. All of the City's pump stations are old; the newest of them is 60 years old. The City's master plan indicates that 5 of the 7 pump stations in the City (Story Park, Sewer Plants #2, 3, 4, and 7) are at or near the end of the useful life. One pump station, Sewer Plant #3, would seem difficult to maintain because it must be accessed through a tunnel due to its location underneath the traffic lanes of I-10. The master plan also recommends replacing the force mains at Sewer Plants #5 and 8.

Recommendation: To comply with Order No. 2006-0003-DWQ, the City should ensure that all proper operation and maintenance procedures are routinely performed at each pump station. All alarm and electrical systems should be tested for proper function, and all routine maintenance should be performed at intervals recommended by the manufacturer. All emergency generators should be properly exercised and maintained. The City should schedule its pump stations and force mains for immediate upgrades to assure reliability, as recommended by its Master Plan.

7. **Fats, Oils, and Grease ("FOG") Program.** The City is subject to the State Water Resources Control Board's (SWRCB) Statewide General WDR for Wastewater Collection Agencies Order No. 2006-0003-DWQ requiring a program designed to eliminate FOG from being discharged into the sewage collection system pipes where FOG is a problem. According to the City's Sewer Master Plan, the City did not have a FOG control program, but was expected that it would be developed by the State WDR deadline of November 2, 2008. Although four of 18 SSOs were reported to have been caused by FOG between 2007 and 2011, the City stated during the inspection that FOG was not a big problem. The City submitted a map of FOG and root locations following the December 2011 inspection, showing that a number of sewer lines in Alhambra are affected by FOG deposition. Figures 1, 2, and 3 in Attachment 1 show a significant deposition of FOG in Sewer Plant #7.

   City Ordinance 02M9-4541 was passed and adopted by the City Council on April 27, 2009 and City Ordinance 02M9-4542 was passed and adopted by the City Council on May 11, 2009. These ordinances prohibit certain substances, including any oil or FOG, from being deposited into the City's sewage collection system, and allows for inspection of interceptors. City staff described to the inspection team its efforts to reduce FOG accumulation from its pump stations as submerging time-release enzyme blocks and regularly pouring "d-limonene" into the wet well to dissolve the floating grease. D-limonene is a polar organic solvent that floats on the surface, and is barely soluble in water; it is used commercially as a degreaser. Because the ordinance prohibits direct deposition of "any oil" into the public sewer system, it would appear that pouring d-limonene into the public sewer at the pump station wet wells may violate the City's own ordinance.

   According to the City, the requirement to install a Grease Removal Device ("GRD") is only triggered when new Food Service Establishments ("FSEs") or when existing FSEs undergo renovation and are required to go through the building and planning process. A change in FSE ownership does not trigger the requirement to install a GRD. Inspectors were told during the interview that although the City has the authority to enforce its sewer ordinance now, it has thus far provided only verbal warnings. According to the

City, a new inspector was hired and annual inspections of all 233 FSEs were expected to commence in January 2012.

Recommendation: To prevent FOG from entering the sewage collection system and eliminate spills due to FOG, the City should begin as soon as possible to aggressively implement its FOG control program.

8. **Flow Measurements and Capacity.** Part D.10 of the State Water Resources Control Board Order No. 2006-0003-DWQ states that an Enrollee must provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events.

   According to the 2009 Master Plan, the sewer collection system capacity analysis was based on a hydraulic model based on assumed sewage generation and current zoning classifications. Peak wet weather flow was calculated based on average dry weather flows. It is not clearly stated in the Master Plan whether any actual flow monitoring was done during wet weather to produce the capacity analysis. The capacity analysis appears to be based on assumptions that may or may not accurately predict system capacity.

   Recommendation: The City should invest in a flow monitoring study to verify the conclusions of the modeling study.

9. **Maintenance Management System and Record Keeping.** Section D.13.iv of the State's Order No. 2006-0003-DWQ requires the City's SSMP include provisions for documenting routine and hot spot maintenance and work orders. In addition, Section B of the Monitoring and Reporting requirements require records of SSOs, and work orders, work completed, and other maintenance records be maintained for five years. The inspection team was told by the City staff that Alhambra has no computerized sewer maintenance management system; no system to generate work orders for scheduling routine maintenance, track planned or completed maintenance, to facilitate or adjust the maintenance frequency, or to generate work orders following SSOs. The City currently uses the "Springbook" billing software application with a service request module to track its work orders. The work orders must be manually entered and closed, and related information is not able to be integrated into the system. Condition assessment information cannot be stored with the work orders or used by crews in the field when performing maintenance work.

   Recommendation: The City should adopt a maintenance management system ("MMS") that would more efficiently allow the City to integrate, map, track, and record maintenance, SSOs, inspection history, and condition assessment of its pipes. An MMS would provide a system for maintaining the SSO documentation required by the State's Order No. 2006-0003-DWQ.

10. **Capital Improvement.** Section D.8. of Order No. 2006-0003-DWQ requires an enrollee to properly operate and maintain its sewer collection system. According to the inspection questionnaire filled out by the City, only 6% of the sewer pipe in the City is under 50 years old. Vitreous Clay Pipe ("VCP") sewer pipe is often considered to have an average functional life of 70 years. The City's 2009 Rehabilitation Plan rated defects in 66 pipe reaches as "severe" and 117 as "major" in 2009. According to the Plan, the estimated cost to upgrade sewers with "severe" and "major" condition priorities is $23,368,000. According to the inspection form, the City's capital improvement fund is $500,000 for a two year period. City staff stated during the inspection that it does about 15 repairs per year to address mainly capacity issues, breaks, and cracks. Staff told inspectors that there remain approximately 6 or 7 "severe" defects to repair. Including recommended upgrades to pump stations, force mains, and manholes, the total is estimated at $46,043,000.

    Regarding the San Pasqual SSO, which occurred at the intersection of Mission Road at San Pasqual Avenue, inspectors requested that Alhambra provide the 2007 CCTV footage of this section of pipe along Mission Road. The 2007 video inspection of pipe segment B6095 was abandoned at 127 feet. This was due to high flow in the pipe, according to a letter dated October 27, 2011explaining the circumstances of the SSO to Mr. Samuel Unger, Executive Officer of the Regional Board. However, the 2007 CCTV inspection of segment B6105 of the pipe on San Pasqual to Mission Road noted a hole in the pipe with visible soil. The 2009 Sewer System Rehabilitation Plan rated the pipe segment, B6105 on San Pasqual "major" and recommended replacement of the pipe from 269 feet to segment B6095 at the intersection with Mission Road. The City's Rehabilitation Plan recommends in Section 3.7 that CCTV inspection should occur annually in locations of "severe" ratings, and every three years where rated "major". CCTV re-inspection of segment B6095 had not been completed within 3 years of the 2007 inspection, nor had the rehabilitation been scheduled and completed as recommended by the City's Rehabilitation Plan. Had the recommendations of the Rehabilitation Plan not been ignored by the City, it is likely that this major SSO would have been avoided.

    Recommendation: The City should aggressively implement the recommendations of its Rehabilitation Plan, especially those regarding sewer system upgrades and CCTV inspection and condition assessment.

11. **Sewer Rates.** Section D.9. of Order No. 2006-0003-DWQ requires enrollees to allocate adequate resources for operation, maintenance, and repair of its sewage collection system. The City reported that it collected $4,091,051 in sewer fees from its ratepayers during the past year while expenses were $1,415,000, leaving a surplus of $2,676,051. If this surplus is applied to the list of recommended capital improvement projects, the projects would require 20 years to complete. Inspectors were told that the City is in the

final year of a 5-year increase. Wastewater collection fees from the City of Alhambra are currently $8.72 per month. The cost of wastewater treatment is paid directly to Los Angeles County Sanitary District #16 as a separate charge on property tax bills. The total current sewer fee is significantly below that of other Southern California cities.

Recommendation: In order to consistently meet sewer system expenses and fund needed rehabilitation work, the City should consider continuing its increased sewer rates to fund recommended capital improvements.

Photographs Taken During the Inspection

Figure 1: Sewer Plant #7, note the substantial FOG floating on the surface in the wet well. Photograph was taken on December 20, 2011 by Chris Lopez, inspector for the State of California, Los Angeles Regional Water Board.

Figure 2: Sewer Plant #7, note the substantial FOG floating on the surface in the wet well. Photograph was taken on December 20, 2011 by Chris Lopez, inspector for the State of California, Los Angeles Regional Water Board.

Figure 3: Sewer Plant #7, note the substantial FOG floating on the surface in the wet well. Photograph was taken on December 20, 2011 by Chris Lopez, inspector for the State of California, Los Angeles Regional Water Board.

SEWAGE COLLECTION SYSTEM INSPECTION FORM
(EPA Reg 9; form revised September 23, 2010)

GENERAL INFORMATION

Inspection Date: 12/20/11

Utility Name: City of Alhambra
Address: 111 South First Street
Contact Person: Claudine Meeker, Deputy Director of Utilities
Phone: (626) 570-5080 Cell:(626) 945-6372 Fax: (626) 282-5833
Email: cmeeker@cityofalhambra.org

Inspectors Names	Agency/Contractor
JoAnn Cola	**US EPA**
Julie Berrey	**State of California Water Board**
Andrew Choi	**Los Angeles Regional Water Board**
Chris Lopez	**Los Angeles Regional Water Board**
Hugh Marley	**Los Angeles Regional Water Board**
Jose Morales	**Los Angeles Regional Water Board**

Utility personnel who accompanied inspectors

Name	Title
Martin Ray	Deputy Director of Utilities
Dennis Ahlen	General Manager-Utilities
Ron Capotosto	Production Supervisor
Claudine Meeker	Deputy Director of Utilities

SYSTEM OVERVIEW

Population: 83,089 (2010 Census) Service Area (Sqr. Miles): 7.5 sq. mi.
Service Area Description: _____

	Residential	Commercial	Industrial	Total
Number of service connections	15, 448	1,654	267	17,369

Combined Sewers (% of system): 0

Name and NPDES permit number for WWTP(s) owned or operated by the collection system utility: N/A

Name and NPDES permit number for WWTP(s) that receive flow from the collection system utility: Los Angeles County Sanitation District #16.

Names of upstream collection systems sending flow to the collection system utility: City of Monterey Park.

Names of downstream collection systems receiving flow from the collection system utility: Los Angeles County Sanitation District #16

Do any interagency agreements exist with upstream collection systems? (Y/N) Yes

Does the utility maintain the legal authority to limit flow from upstream satellite collection systems? (Y/N) No

SYSTEM INVENTORY (LIST ONLY ASSETS OWNED BY UTILITY)

Miles of gravity main	Miles of force main	Miles of Laterals	Number of maintenance access structures	Number of pump stations	Number of siphons
128	1.51	0	2,800	7	3

Utility responsibility for laterals (none, whole, lower) None.

Size Distribution of Collection System

Diameter in inches	Gravity Sewer (miles)	Force Mains (miles)
6 inches or less	1.33	.16
8 inches	111.05	1.01
9 - 18 inches	10.32	.33
19 - 36 inches	5.78	0
> 36 inches	0	0

Age Distribution of Collection System

Age	Sewer Mains, miles	# of Pump Stations
0 - 25 years	0	0
26 - 50 years	6.4	0
51 - 75 years	35.84	2
> 76 years	85.76	3

SYSTEM FLOW CHARACTERISTICS

Collection System		
Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)	Peak Instantaneous Wet Weather Flow (MGD)
5,000,000	6,000,000	7,000,000

Location of flow monitor(s) from which above information obtained: **Manhole IDs – C3029; C4110; C4275; D5013; C4029; C6104; C4330**

Period over which flow was monitored: **Sites 1, 2, 3, 4, 6, and 7 were monitored January 30, 2005 to March 20, 2005; Site 5 was re-monitored August 12, 2005 to August 19, 2005.**

Agency conducting the flow monitoring: **ADS Environmental Services**

If no flow monitors, describe method for estimating flows:

Wastewater Treatment Plant		
Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)	Peak Instantaneous Wet Weather Flow (MGD)
Not Applicable		

Upstream Satellite Name	Avg. Dry Weather Flow		Peak Flow (MGD)	Flow based on meter or estimate?
	(MGD)	% of total flow		
City of Monterey Park	.043	< 1%	20-50 gpm	estimate

Constructed Overflow Points		
Overflow Point	Location	Number of Discharges/Year
None		

REGULATORY BACKGROUND

Does the system operate under the provisions of an NPDES permit (either their own or under provisions of another agencies permit)? (Y/N) Yes

Permit holder County of Los Angeles Department of Public Works (Principal Permittee)
Permit # CAS004001

List provision of the permit that apply (If permit holder is other than the agency being inspected)
Part 4 Special Provisions, Section F – *Public Agency Activities, Subsection 1 Sewage System Maintenance, Overflow, and Spill Prevention*

Does the system operate under a state permit? (Y/N) Yes
Are there any spill reporting requirements? (Y/N) Yes
Which agency (or agencies) promulgates the spill reporting requirements? State Water Resources Control Board.

Outline the spill reporting requirements (summarize spill reporting requirement for each applicable statute, regulation and permit):
Requirements outlined in City Spill Response Plan.

SPILLS

Sanitary Sewer Overflows From and Caused by Utility									
Note: Spill Rate = number of SSOs/100 miles of sewer pipe/year									
Year	Mains (Miles of Mains 128)			Laterals (Miles of Laterals __0__)			Totals (Total Miles 128)		
	#SSOs	(1)Spill Rate (see below)	Gross Spill Volume	#SSOs	(2)Spill Rate (see below)	Gross Spill Volume	Total SSOs	(3)Total Spill Rate (see below)	Total Gross Spill Volume
2006	12	9.3	72,410				12	9.3	72,410
2007	7	5.4	3,589				7	5.4	3,589
2008	3	2.3	56,130				3	2.3	56,130
2009	2	1.5	1,100				2	1.5	1,100
2010	2	1.5	2,950				2	1.5	2,950
2011	4	3.1	144,800				4	3.1	144,800
Total	30	23.1	278,029				30	23.1	278,029

(1)Spill Rate = [(#SSOs in main pipe) X 100]/Miles of Main Pipe in System
(2)Spill Rate = [(#SSOs in laterals) X 100]/Miles of Lateral in System
(3)Total Spill Rate = [(#SSOs in Main + #SSOs in Laterals)X100]/[Miles of Main + Miles of Laterals]

Spill Cause

Year (as listed in Table above)	Blockage								Gravity Pipe Break		Force Main Break		Pump Station		Capacity	
	Grease		Roots		Debris		Multiple									
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
2006	4	33.3	2	16.6	2	16.6	3	25					1	8.3		
2007			4	57									3	43		
2008							1	33.3					2	66.6		
2009			1	50	1	50										
2010					1	50					1	50				
2011	2	50							1	25			1	25		
Total	6	83.3	7	123.6	4	116.6	4	58.3	1	25	1	50	7	142.9		

Please attach a copy of facility spill records for each of the past five years. The information for each spill should include, at a minimum, the following: Date of spill, time spill reported, location of spill (address and city), whether the spill occurred in a private lateral, whether it reached a surface water, total volume of the spill, volume of spill recovered, volume of spill that reached a surface water, the appearance point of the spill, final spill destination, spill cause and explanation, whether a health warning was posted.

BUILDING BACKUPS (list only backups caused by problems in sewer mains)		
Year	Number of backups	Cost of Settled Claims
2011	1	$ 0
TOTAL	1	$0

STAFFING

Indicate *Number of Staff – As pertaining specifically to collection system responsibilities

***Provided as numerical or FTEs or positions**

Management and Administrative: Budgeted .5 Filled 1.5

Maintenance: Budgeted 5 Filled 5

Electricians and Mechanical Technicians: Budgeted 0 Filled 0

Operators: Budgeted 1 Filled 1

Engineering: Budgeted 0 Filled 0

Number of Certified Collection System Operators/Certification Program: 9

Number of Sewer Cleaning Crews: 2

Sewer Cleaning Crew Size: 2-3

Contractor Services	**Contractor Name(s)** (NA if contractors not used)	**Cost ($/year)**
Sewer Cleaning	N/A	
Chemical Root Control	Duke's Root Control	$10,000.00
Spot Repairs	Various	$200,000.00
CCTV	Empire	$10,000.00
Spill Response	Various	Varies
Other:		

EQUIPMENT

List Major Equipment Owned by the Utility:

Equipment	**Number**	**Number in Service**
Combination Trucks (hydroflush and vactor)	1	1
Hydroflusher	2	2
Mechanical Rodder	0	0
CCTV Truck	0	On order
Utility Truck	4	4
Portable Pumps	4	4
Portable Generator	8	8

FINANCIAL

Does the collection system operate from an enterprise fund? Yes/No: Yes

REVENUES	
Revenue Source	**Annual Revenue ($/year)**
User Fees	$1,316,333.00
Connection Fees	$2,774,718.00
Grants	N/A
Bonds	N/A
SRF Loans	N/A
TOTAL	$4,091,051.00

EXPENSES		
Expense	**Annual Cost ($/year)**	**Cost / Mile of Pipe** (Total Pipe Mileage: 128)
Maintenance	$400,000.00	$2,125.00
Operations (electric, fuel, etc.)	0	0
Salaries and Benefits	$635,000.00	$4,960.00
Capital Improvements	$380,000.00	$2,968.00
Debt payments	0	0
TOTAL	$1,415,000.00	$10,053.00

Average Monthly Household User Fee for Sewage Collection: $8.72
Wastewater Treatment: $0 (collected via Property Tax bills payable to County Sanitation District
Total Wastewater Fees: $8.72

Sewer Fee Rate Basis (i.e. water consumption, flat rate, etc.): Consumption per hundred cubic foot usage.

Last Fee Increase (Date): July 2011

Planned Fee Increases: July 2011 was the last year of an adopted Five-Year Rate Increase program.

Capital Improvement Fund: $500,000.00 for 2 years

SPILL RESPONSE, NOTIFICATION AND REPORTING

Does the Utility Have a Written Spill Response Plan? Yes
Is the Plan Carried by Maintenance/Spill Response Crews? Yes

Indicate Elements Included In the Spill Response Plan		
Element	**Y/N**	**Comment**
Identification of Responsible Staff	Y	
DISPATCH		
System for Becoming Aware of Spills	Y	
System for Receiving Public Calls	Y	
Dispatch Procedures – Normal Hours	Y	
Dispatch Procedures – After Hours	Y	
Coordination with First Responders (police, fire department)	Y	
Response Time Goal	Y	
SPILL CONTROL/MITIGATION		
Spill Response Activity Sequence	Y	
Spill Site Security	Y	
Procedures for Stopping Spills	Y	
Spill Containment	Y	
Protection of Storm Drains	Y	
Cleanup/Mitigation	Y	
DOCUMENTATION		
Spill Volume Estimation Method (list method in comment field)		Flow estimation pictures
Determination of Spill Start Time	Y	
Spill Sampling	N/A	Only if required by County or State
Receiving Water Sampling	N/A	See above
Photographing Spill Site	Y	Only if unusual circumstances dictate
Field Notes Form	Y	
Spill Report Form	Y	
NOTIFICATION		
Notification of Affected Public (schools, recreational users, etc.)	Y	
Posting Warning Signs	N	
Sanitation Information re: building backups	Y	
REPORTING		
Reporting Procedures	Y	
Spill Report Forms	Y	
Persons Responsible for Filing Reports	Y	

Are all spills reported regardless of volume? Yes
Are Contractors Required to Follow Spill Response Procedures? Yes
Average Spill Response Time (normal work hours): 30 minutes or less
Average Spill Response Time (after hours/holidays): 1 hour
Does the Utility CCTV Pipes Following Spill? No
Are Cleaning Schedules Adjusted in Response to Spills? Yes

SEWER CLEANING AND MAINTENANCE

Does the Utility Have Detailed Sewer System Maps? Yes
Are Maps on GIS Database? Yes
Are Maps Available to Maintenance Crews? Yes

Maintenance Management System is (check whichever is applicable):
Written __X__ Computerized _____ Both _____ Other (describe) _____

ANNUAL SEWER CLEANING – Include hydroflushing, mechanical and hand rodding		
Pipe Cleaning excluding repeats		Pipe Cleaning Including Repeats
(miles/year)	% of system/year	(miles/year)
128	100%	128

What does the crew report for total length of pipe cleaned in a single visit if they clean the same pipe segment more than once during that visit?

System Cleaning Frequency (years to clean entire system): one year
Types of problems subject to hot spot cleaning? Roots and grease.

HOT SPOT CLEANING SCHEDULE			
Cleaning Frequency	Number of Locations	Pipe length excluding repeats (miles)	Pipe length including repeats (miles)
1/month			
6/year			
4/year			
2/year			
1/year	3	< 1 mile	

CHEMICAL ROOT TREATMENTS
Length of pipe subject to chemical root treatments (miles/year): 1.1
Chemical treatment frequency: Annually
Root treatment chemicals used: Razorooter II (diquat dibromide EPA Reg. No. 64898-8)

SPOT REPAIRS
Spot repairs completed annually: 12-15 (#/year); .5 (miles/year)
Spot repair budget ($/year): 250,000.00
Spot repair expenditures last year: $ 150,000.00; year: FY 2010-11

ODORS
Annual number of complaints: 1
Odor hot spot locations: Sewer Plant #2
Odor treatment facilities: N/A

EASEMENT PIPE CLEANING
Total length of easement pipes (miles): 3/4 mile
Annual easement pipe cleaning (miles/year): 3/4 mile annually
Do maintenance workers have access to all easements? Yes

FATS, OILS AND GREASE (FOG) CONTROL

Does the Utility have a FOG source control ordinance? Existing Title XVI of Municipal Code refers to sewers generally.
Ordinance Citation: Chapter 16.08.100:General Provisions; 16.20: Interceptors; 16.24.010: Discharges
Agency responsible for implementing the FOG control program: City of Alhambra

Number of Food Service Establishments (FSEs) in service area: 233
Number of FSEs subject to FOG ordinance: Projected to be all 233.

Indicate Elements Included In the Food Service Establishment FOG Source Control Program		
Element	**Y/N**	**Comment**
FSE Permits	N	Permits will not be required in new ord.
FSE inspections	Y	Inspection Program begins Jan. 2012
FSE enforcement		TBD
Oil & grease discharge concentration limit		TBD
Grease removal device (GRD) requirements:		
traps	Y	
interceptors	Y	
Automatic cleaning traps	N	
FSEs subject to GRD installation:		
all FSEs (new and existing)	N	
new FSEs	Y	
remodeled FSEs	Y	
for cause at existing FSEs	Y	
GRD maintenance requirements:		
Cleaning frequency	1/3mos.	Will be included in new ordinance
25% rule (grease and solids accumulation)		Will be included in new ordinance
Kitchen BMP Requirements (list required BMPs below)		
"Dry Cleanup Method"	Y	
Put FOG into sealed containers for proper disposal	Y	
Clean grease traps and interceptors frequently	Y	
Allowance for chemical additives?	N	TBD in new ordinance
Allowance for biological additives?	N	See above
FOG Disposal Requirements	Y	
FOG Disposal Manifest System		Will be included in new ordinance

Number of FOG Program staff:
Inspectors 2
Permit writers _____
Other 1

FSE Inspection frequency: annually
Annual number of FSE inspections: TBD
Does Utility use CCTV to identify FOG sources? Yes

Currently, inspections are conducted in coordination with NPDES inspections of all restaurants, industrial, and commercial facilities. Beginning January 2012, inspections of FSEs will be conducted at least annually.

Does sewer maintenance staff coordinate with FOG source control program staff? Yes
Cleaning targeted to FOG hot spots? Yes
Maintenance crew referrals to FOG program? Yes
Pipe repairs at FOG hot spots? Yes

Describe program for public outreach and education related to residential FOG sources:
Information is distributed to the public at all City events; pamphlets are available at City Hall and other City facilities; information is included on the City website; articles are published in the local newspaper several times a year.

PIPE INSPECTION AND CONDITION ASSESSMENT

Gravity Main Inspection

Describe Pipe Inspection Methods:

Miles of Pipe Inspected in the Last 10 Years and Planned Inspection Next 10 Years				
Date Range	Inspection Method	Miles of Pipe without repeats	Useable Condition Assessment	
			Miles of Pipe (without repeats)	% of System (System miles: 128)
2001 to present	CCTV	136.25		
19__ to present	Other			
Present to 2021	CCTV	320		100%
Present to 20__	Other			

Describe Planned Pipe Inspection: CCTV pipe one quarter of the City per year.

Summary of Condition Assessment Findings: The problems identified most often were cracks (1,388 reaches, 52% of total), fine roots (1,208 reaches, 45% of total), and vermin (1,510 reaches, 56% of total). More detailed assessment can be found in the City Rehabilitation Plan in Section 3, Figures 2, 3, 4, and 5.

Force Mains

Describe Force Main Inspection Methods: CCTV

Describe Program for Inspecting Air Relief Valves: Visually inspected daily and maintained every five years.

Private Laterals

Does the Utility Inspect Private Laterals? **No**

Number of Private Laterals Inspected 19__ to Present: _____

Summary of Inspection Findings:

Number of Private Laterals Planned for Inspection Present to 20__ : _____N/A_____

CAPACITY ASSURANCE

List Locations and Dates of Repeat Capacity Spills: None

List Locations of Known Capacity Bottlenecks: Outlined in Sewer Master Plan and Rehab Plan.
Dry Weather:

Wet Weather:

Describe I&I Assessments Completed by the Utility (dates, area covered, findings, etc.):

Flow Meters (number, locations): None

Describe Flow Model Used by the Utility:

Inflow
Does the Utility Prohibit Storm Water Connections to the Sanitary Sewer (roof drains, sump pumps, etc.)? Yes.

Describe Program for Enforcing Ban on Illicit Connections:

Describe Program for Locating Illicit Connections (smoke testing, etc.):

Locations Subject to Street Flooding: Sixth Street underpass, n/o Hellman Avenue.

Has the Utility Sealed Manholes in Locations Subject to Street Flooding: Yes.

I&I Control
Describe I&I Control Projects (miles of pipe rehabilitated or replaced for I&I Control)
Recently Completed Projects: None.

Planned Projects:

Describe Capacity Control Measures (relief sewers, storage, WWTP expansion, etc.)
Recently Completed Projects: None.

Planned Projects:

INFRASTRUCTURE RENEWAL AND CAPITAL IMPROVEMENTS

Pipe Rehabilitation and Replacement Methods Used: Slip-liningof existing pipe will be done for future projects; replacement of existing pipe.

Miles of Pipe Rehabilitated or Replaced: Last 10 Years and Planned Next 10 Years		
Date Range	Miles of Pipe	% of System (System miles: 128)
19__ to present		
Present to 2021	As outlined in Rehab Plan	

Describe Capacity Improvement Program: Prioritize work for lift station with the greatest wet well structural deficiencies; deficiencies in the firm pumping capacity; and wet well capacities. Prioritize work for gravity sewer lines with existing dry weather capacity deficiencies; diversion or replacement facilities that would alleviate capacity deficiencies that may occur during wet weather events; and lines that have shown calculated capacity deficiencies but are currently adequate.

List Major Planned Improvements: Rehabilitation of Sewer Plants # 3, 2, 7, 4; relocation of Sewer Plant #3; Upgrade electrical and control system, replace force main at Plan #8; replace force main at Plant #5

Describe Master Plan: The objective of the Master Plan is to evaluate the City's sewer collection system to provide a framework for undertaking the construction of new and replacement facilities for the service area in an efficient and cost effective manner. As a planning document, it is general in nature and is predicated upon the best information available at the time.

The Master Plan Scope of Work includes the following sections:

- Research and Data Collection
- Sanitary Sewer Database and GIS
- Sewer System Model
- Flow Monitoring and Unit Flow Factors
- Development of Capital Improvement Program
- Master Plan Report
- Sewer Standard Plans
- Regulations
- Financial Plan for Improvement Program
- Future Regulations – CMOM
- Statewide General Waste Discharge Requirements – SSMP
- Government Accounting Standards Board Statement 34

The Master Plan Sections include:

- Executive Summary
- Introduction
- Study Area
- Criteria
- Existing Sewer System
- Lift Stations
- System Analysis
- Capital Improvement Program

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: STORY PARK: 210 N. Chapel Avenue

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Submersible	100 gpm	Constant	Yes
Pump #2	Submersible	100 gpm	Constant	Yes

Pump Station Information:

A. Average flow: .5 gpm
B. Holding Time: 24-48 hours
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes___X___No_____
   Peak Wet Weather Flow: Yes___X___No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) ____No_____
E. Wet weather capacity limitations? Y/N (if yes, describe) ____No_____
F. Number of failures resulting in overflows/bypass or backup, in the last five years ____0____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No_____**N/A**
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type:**

On-site generators	Portable Generators	Back-Up Line from same grid? N/A	Back-up Line from different grid? N/A	Other (describe)
Yes____No_X___	Yes__X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____
_____

K. **Station Alarms:**

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X__No___	Yes_X__No____	Yes_X___No____	Yes___No__X__	

a) Is there 24 hour coverage for alarms? Yes____X___No_____
b) Alarm signal sent to: _call-out staff via SCADA _____

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; generators
M. Are there SCADA controls? Yes ___X_____ No _____
   If yes, ability to operate station remotely? Yes ___X_____No_____

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 2 - 2239 S. Meridian Ave.

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Wet/Dry Well	650 gpm	Constant	Yes
Pump #2	Wet/Dry Well	650 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 430 gpm
B. Holding Time: 30 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
Peak Dry Weather Flow: Yes___X____No_____
Peak Wet Weather Flow: Yes_____No___X____
D. Dry weather capacity limitations? Y/N (if yes, describe) _No_____
E. Wet weather capacity limitations? Y/N (if yes, describe) Yes. Capacity is lower than peak wet weather flow of 1,311 gpm.
F. Number of failures resulting in overflows/bypass or backup, in the last five years ___0_____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X___
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type**:

On-site generators	Portable Generators	Back-Up Line from same grid? N/A	Back-up Line from different grid? N/A	Other (describe)
Yes____No__X__	Yes__X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____
_____

K. **Station Alarms**:

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X__No___	Yes_X__No____	Yes_X___No____	Yes___No__X__	

a) Is there 24 hour coverage for alarms? Yes____X_____No_____
b) Alarm signal sent to: call-out staff via SCADA_____

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; generators.
M. Are there SCADA controls? Yes _____X_____ No _____
If yes, ability to operate station remotely? Yes ____X_____ No_____

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 3 –Across 3220 Balzac St.

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1 West	Wet /Dry Well	250 gpm	Constant	Yes
Pump #2 East	Wet/Dry Well	250 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 135 gpm
B. Holding Time: 30 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes___X____No_____
   Peak Wet Weather Flow: Yes__X__ No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) ____No_____
E. Wet weather capacity limitations? Y/N (if yes, describe) __No_____
F. Number of failures resulting in overflows/bypass or backup, in the last five years ___0_____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X___
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type:**

On-site generators	Portable Generators	Back-Up Line from same grid? N/A	Back-up Line from different grid? N/A	Other (describe)
Yes__X__No____	Yes__X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____

_____

K. **Station Alarms:**

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X__No___	Yes_X__No____	Yes_X___No____	Yes___No__X__	

a) Is there 24 hour coverage for alarms? Yes____X_____No_____
b) Alarm signal sent to: __on-call staff via SCADA_____

L. What equipment is available for emergency response? _Vactor truck; by-pass pumps; generators.
M. Are there SCADA controls? Yes ____X_____ No _____
   If yes, ability to operate station remotely? Yes _____X__ No_____

PUMP STATIONS

(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 4 – 1700 Westmont Drive

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Wet/Dry Well	750 gpm	Constant	Yes
Pump #2	Wet/Dry Well	750 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 269 gpm
B. Holding Time: 21 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes___X___No_____
   Peak Wet Weather Flow: Yes___X___ No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) No
E. Wet weather capacity limitations? Y/N (if yes, describe) Yes: capacity is lower than the existing and ultimate peak wet weather flow of 851 and 906 gpm.
F. Number of failures resulting in overflows/bypass or backup, in the last five years ___0____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X___
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type**:

On-site generators	Portable Generators	Back-Up Line from same grid? N/A	Back-up Line from different grid? N/A	Other (describe)
Yes___No__X__	Yes__X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____

_____

K. **Station Alarms:**

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X_No___	Yes_X__No____	Yes_X___No____	Yes___No__X__	

a) Is there 24 hour coverage for alarms? Yes___X_____No_____
b) Alarm signal sent to: __on-call staff via SCADA_

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; generators.
M. Are there SCADA controls? Yes ____X_____ No _____
   If yes, ability to operate station remotely? Yes ___X_____ No_____

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 5 – 913 Clay Court

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Wet/Dry Well	400 gpm	Constant	Yes
Pump #2	Wet/Dry Well	400 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 25 gpm
B. Holding Time: 84 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes__X____No_____
   Peak Wet Weather Flow: Yes____X_____No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) __No_____
E. Wet weather capacity limitations? Y/N (if yes, describe) __No_____
F. Number of failures resulting in overflows/bypass or backup, in the last five years ___0____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X___
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type:**

On-site generators	Portable Generators	Back-Up Line from same grid? N/A	Back-up Line from different grid? N/A	Other (describe)
Yes____No__X__	Yes__X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____

_____

K. **Station Alarms**:

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes__X_No___	Yes_X__No____	Yes__X__No____	Yes___No__X__	

a) Is there 24 hour coverage for alarms? Yes___X_____No_____
b) Alarm signal sent to: on-call staff via SCADA

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; generators.
M. Are there SCADA controls? Yes _____X_____ No _____
If yes, ability to operate station remotely? Yes ___X_____ No_____

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 7 – 2517 Hathaway Avenue

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Wet/Dry Well	550 gpm	Constant	Yes
Pump #2	Wet/Dry Well	550 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 194 gpm.
B. Holding Time: 21 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes___X____No_____
   Peak Wet Weather Flow: Yes____X_____No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) __No_____
E. Wet weather capacity limitations? Y/N (if yes, describe) Yes: the capacity is lower than the existing and ultimate peak wet weather flow of 631 gpm and 689 gpm.
F. Number of failures resulting in overflows/bypass or backup, in the last five years ___0_____
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X___
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type:**

On-site generators	Portable Generators	Back-Up Line from same grid?	Back-up Line from different grid?	Other (describe)
Yes____No_X___	Yes_X___No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____
_____

K. **Station Alarms:**

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X__No___	Yes_X__No____	Yes_X___No____	Yes___No_X___	

a) Is there 24 hour coverage for alarms? Yes___X_____No_____
b) Alarm signal sent to: on-call staff via SCADA

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; emergency generators.
M. Are there SCADA controls? Yes ____X_____No _____
If yes, ability to operate station remotely? Yes __X_____ No_____

PUMP STATIONS
(Please complete one sheet for EACH pump station)

Name and Location of Pump Station: Sewer Plant No. 8 – 1200 Block of Mansfield Pl.

Pump Information

Pump #/Name	Dry or Submersible	Capacity	Constant or Variable	In Service?
Pump #1	Wet/Dry Well	50 gpm	Constant	Yes
Pump #2	Wet/Dry Well	50 gpm	Constant	Yes

Pump Station Information:

A. Average flow: 2 gpm.
B. Holding Time: 288 minutes
C. Does station have sufficient pumping capacity with the largest pump out of service during:
   Peak Dry Weather Flow: Yes__X__ No_____
   Peak Wet Weather Flow: Yes__X__ No_____
D. Dry weather capacity limitations? Y/N (if yes, describe) No
E. Wet weather capacity limitations? Y/N (if yes, describe) No
F. Number of failures resulting in overflows/bypass or backup, in the last five years 0
G. Total quantity of overflow/bypass: Gallons or MG _____
H. Is dry well protected from wet well overflow? Yes____ No__X__
I. How often is pump station inspected? **Daily**
J. **Back up power sources and type:**

On-site generators	Portable Generators	Back-Up Line from same grid?	Back-up Line from different grid?	Other (describe)
Yes____No_X__	Yes_X__No____	Yes____No____	Yes____No____	

If generators on-site, describe testing and maintenance procedures: _____

_____

K. **Station Alarms:**

Low Wet Well	High Wet Well	Power Loss	Unauthorized Entry	Other (Describe)
Yes_X__No___	Yes_X__No____	Yes_X___No____	Yes__No_X___	

a) Is there 24 hour coverage for alarms? Yes__X__ No_____
b) Alarm signal sent to: on-call staff via SCADA

L. What equipment is available for emergency response? Vactor truck; by-pass pumps; generators.
M. Are there SCADA controls? Yes __X__ No _____
If yes, ability to operate station remotely? Yes __X__ No_____