COMPLIANCE INSPECTION REPORT

Facility Name and Location	CIWQS Inspection ID:	Inspection Date:
City of Victorville [CIWQS Place ID: 645136] 14343 Civic Drive Victorville, CA 92392	22739830	12-09-2015
	Inspection Report Author:	**Title:**
	Bryan Elder	WRCE
	Signature:	**Date:**
		02-19-2016

WDID No.	Order No.	Legally Responsible Person:	Permit Effective Date:	Permit Expiration Date:
6SSO11425	2006-0003-DWQ	Brian Gengler	01-05-2007	NA

Inspection Team:	Agency	Entry Date/Time:	Exit Date/Time:
Bryan Elder	SWRCB – Office of Enforcement	12-09-2015 / 0805	12-09-2015 / 1730
John Morales	RWQCB – Lahontan		
Mike Coony[1]	RWQCB – Lahontan		
Cephas Hurr[2]	RWQCB – Lahontan		
Ghasem PourGhasemi[3]	RWQCB – Lahontan		
Jay Cass[4]	RWQCB – Lahontan		

Facility Representatives

Name:	Title:	Point of Contact:	Phone/Email:
Brian Gengler	City Engineer	X	(760) 955-5156 / bgengler@victorvilleca.gov
Joe Flores	Public Works Manager		
Stephan Longoria	Associate Civil Engineer		
Doug Mathews	Division Head – Public Works & Water		
Latif Laari[5]	VVWRA Regulatory Compliance Supervisor		
Sam Arvizu[6]	Public Works Supervisor		
Mitch Tucker[7]	Lead Collection System Operator		
Jorge Duran[8]	Code Enforcement Manager		

[1] Mike Coony attended the morning session of the inspection process. He was not present during the field inspection or debrief conference at the conclusion.
[2] Cephas Hurr attended the morning session of the inspection process. He was not present during the field inspection or debrief conference at the conclusion.
[3] Ghasem PourGhasemi attended the afternoon, field inspection and debrief conference. He was not present for the morning session of the inspection process.
[4] Jay Cass was present for the debrief conference.
[5] Latif Laari was present for the entire inspection process on behalf of Victor Valley Wastewater Reclamation Authority (VVWRA).
[6] Sam Arvizu was present for the field inspection and debrief conference. He was not present for the morning session of the inspection process.
[7] Mitch Tucker was present for the field inspection. He was not present for the morning session or debrief conference.
[8] Jorge Duran was present for the debrief conference and provided additional code enforcement related information following the inspection.

Inspection Consent Approved By:	Date/Time:
Brian Gengler	12-09-2015 / 0805

Collection System General Information				
Service Population:	**Miles of Gravity Pipe:**	**Miles of Force Main Pipe:**	**No. of Pump/Lift Stations:**	**Relative Age of Collection System**
112,000	683.83	4.08*	7	>93% post-1980

Note: General Information provided by facility in the Pre-Inspection Questionnaire provided to the inspection team on 12-02-2015.

*Mr. Flores explained during the inspection that this number represents the total mileage of force main, including inactive segments. There is approximately 1.1 miles of active force main piping.

Inspection Detail

On December 9, 2015, we (the inspection team listed above) performed a scheduled compliance inspection of the sanitary sewer collection system for the city of Victorville (City). The purpose of the inspection was to evaluate the City's compliance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems specified in State Water Resources Control Board Order No. 2006-0003-DWQ (Order). Prior to the inspection, we requested the City complete and submit a Pre-Inspection Questionnaire (Questionnaire) for review (**Attachment 1 – Request for Information**). In addition to the completed questionnaire, we requested additional documents and information to aid in the system review process. We received the completed and signed Questionnaire on December 2, 2015 (**Attachment 2 – Pre-Inspection Questionnaire**). I notified the City (Joe Flores) of our intent to inspect on Monday, December 7, 2015. Additional documents were received in person on December 8, 2015 from Mr. Longoria. Mr. Flores coordinated Public Works and Engineering staff to be present on December 9, 2015.

PART A: PRE-FIELD INSPECTION CONFERENCE

1. INTRODUCTION AND RECORDS REVIEW

We arrived at the City Hall Engineering Department (14343 Civic Drive, Victorville) at approximately 0800 on December 9, 2015. We were directed to a conference room where we were met by the facility representatives listed above (Note: not all representatives were available for the entirety of the inspection process). I proceeded with introductions of the inspection team, an explanation of the scope and intent of the inspection, and the general agenda for the day. A sign-in sheet was used to document inspection participants (**Attachment 3 – Sign-In Sheet**). At 0805, I asked for consent to conduct the inspection including reviewing documents, photographing inspection activities, and interviewing City personnel, which was provided by Mr. Gengler.

Post-Inspection Note: The City responded in an informal information request on January 21, 2016, providing an updated organization chart (**Attachment 4 – Organization Chart**).

2. CAPITAL IMPROVEMENT PLAN

Due to scheduling conflicts preventing Mr. Gengler and Mr. Mathews from attending the inspection in its entirety, we started with the City's Capital Improvement Plan (CIP) to allow for their participation. In the Questionnaire, the City stated that they had spent approximately $40,000 on capital expenditures for sewer assets in the last fiscal year (Question 5.11, page 11). The estimated spend for the current fiscal year is stated as approximately $1.7 million (Question 2.6, page 5). Furthermore, a 2008 Sewer Master Plan prepared by Earth Tech Inc. identified and

recommended capacity enhancing projects totaling approximately $43 million ($17 million for upgrading of existing piping) to meet projected system demands for 2014[9].

I asked the City to describe some of the recent capital projects that have been completed. Mr. Longoria explained that the most recent projects have focused on diverting wastewater flows to alleviate capacity issues in certain areas of the collection system. He described a diversion project on Amethyst Road where surcharging mains flowing to the east were causing residential lateral backups. The flow was diverted to the north alleviating this issue. This project had an estimated cost of $120,000 (based on an informal information request received from the City on January 21, 2016). Mr. Longoria also described a major project at the Southern California Logistics Airport (SCLA) and an emergency project at a Mojave River crossing.

I asked the City how it prioritizes and schedules capital improvement projects. The City explained that it has recently contracted with David Evans & Associates to complete a new hydraulic analysis for the collection system and update the sewer master plan previously completed in 2008. The master plan will detail a five year project plan to replace and/or upgrade existing main lines throughout the city. Included in the master plan is a rate study conducted by NBS to evaluate utility rates and connection fees. The master plan is expected to be finalized over the next couple months. Although some priority projects may be identified in the master plan that could be implemented within the current fiscal year, the City does not expect to spend the currently budgeted funds within the fiscal year.

I then asked about the projects listed in the current CIP posted to the City's website[10] (**Attachment 6 – 2015 Capital Improvement Project Plan**). Several projects are currently listed with approved budgets for fiscal years 2015/2016 and 2016/2017. One project, "El Evado sewer main", projects $400,000 in estimated costs. Mr. Longoria was not immediately familiar with this project, and believed its intention was to act as a sewer diversion from Brentwood Street. Another large project noted on the five year CIP is the Federal Bureau of Prisons (FBOP) lift station. The project has a fiscal year 2016/2017 budget of $2.7 million for design and construction. Longoria explained that a trunk line would be constructed near FBOP, which would include constructing a lift station to take more wastewater flow to the City's wastewater treatment plant located at SCLA. The City has not decided whether to move forward with this project; and the demand for water will play a part in the decision making. It is unlikely the project will move forward as scheduled.

Mr. Longoria also described a lift station project, instigated by a Victor Valley Wastewater Authority (VVWRA) capital improvement project, being constructed at the intersection of 10th Street and D Street. The $180,000 project will be reimbursed by VVWRA, but the City will own and operate the station. The system will incorporate an auto-dialer system with three to four level sensors. The project calls for the replacement of 21-inch sewer pipe with approximately 347 feet of 4-inch force main and was projected to break ground the week of December 14, 2015.

In addition to collection system assets, the City also explained that they have proceeded with the purchase of a new sewer combination truck, with an estimated cost of $500,000. The City expects to receive the vehicle within a 12 month timeframe.

Post-Inspection Note: On January 21, 2016, the City provided more details regarding capital improvement projects completed from 2008 to present (**Attachment 5 – Completed Capital Improvement Projects**). The listed projects had an estimated total cost of approximately $10.5 million and include capacity enhancement projects and emergency repairs.

3. STAFFING, TRAINING AND SERVICE CALLS

[9] Sewer System Master Plan and Collection System Model, Draft Final for Review, Rev. 1, March 2008, EarthTech. http://www.victorvilleca.gov/uploadedFiles/CityDepartments/Engineering/Victorville_Master_Plan_-_DRAFT_FINAL.pdf

[10] 2014-2015 CIP. http://www.victorvilleca.gov/uploadedFiles/CityDepartments/Engineering/2014-2015%20CIP.pdf

The City currently has 11 personnel responsible for the collection system that are budgeted through various City functions and revenue sources. Typical working hours are four days per week, 0630 to 1530. The City encourages third party training and certifications such as California Water Environment Association (CWEA) collection system operator certification, which many field personnel have obtained. Although certification is not required, the City does reimburse employees for the cost of preparatory courses and continuing education. The City also regularly conducts internal training through biweekly tailgate meetings. These meetings include such training topics as City policy and procedures, portable pump operation, use of gas detectors, and general equipment inspection and maintenance.

Service calls during normal business hours are received by administrative personnel located at the City's Public Works building located at 14177 McArt Road. A call is documented in the MUNIS work order system, which generates a hard copy work order. The work order is given to either a crew leader or supervisor and is used to document findings in the field. The form is returned to the administrative personnel for work order close-out and is electronically saved. The MUNIS system does not have the ability to track maintenance or inspection activity, however, the City is currently working with the vendor to improve functionality.

For after-hours calls, a recorded message refers emergency calls to the Fire Department's dispatch center. Dispatch is trained to call the standby duty person directly. The City's standby system is established by an active, self-governing standby board with its own officers and policies. The system rotates through Public Works personnel, with each person committed to a seven day assignment. Although the standby person is not always a collection system operator, all standby personnel are trained for specific types of emergency response in order to qualify to be selected for duty. Other departments (e.g. water distribution) have their own standby qualifications.

4. VANDALISM

We discussed with the City that several historical sanitary sewer overflows have been the result of vandalism (10 from 2007 to present). I asked the City what efforts have been made to prevent such acts. Mr. Flores indicated that the City has placed "locking" covers on many manholes in high risk areas throughout the City. These covers uses lockdown bolts with a pentagon-shaped head, thus requiring a special socket to remove. It was understood that this new design and construction standard will be implemented for all manhole covers. In other cases, maintenance staff attempts to bury the manhole with surrounding sand/dirt in an effort to hide or discourage tampering. Many of the manholes located in remote easements and washes are elevated to prevent inflow, making burying not an option. Because of the remoteness of these areas, vandals have sometimes removed the steel frame in order to gain access. The City has tried, in some cases, to apply epoxy in order to seal the ring to the mortar. When asked if surveillance such as cameras were feasible, the City responded that there are no features that would allow a camera to be installed without risking it being tampered with or stolen. I asked Mr. Flores about driving the sewer alignments in the rural and dry wash areas of the City. He said that supervisors do occasionally perform such activities, however, it is not a scheduled practice due to the lack of staff resources, and accessibility remains an issue for many areas. Mr. Flores and Mr. Longoria estimated that approximately 1,000 manholes were located in easement/dry wash areas considered unprotected.

The City has recently deployed about a dozen SmartCovers throughout the City. Some are located in high risk areas such as near dry washes. Others are located in high maintenance areas. The SmartCovers provide real-time flow characteristics for these areas and immediately alert maintenance personnel to surcharge issues and potential SSO conditions. The SmartCovers are also equipped and programmed with intrusion detection so that an alarm is sent out in the event the cover is removed. The City has included budget to purchase additional SmartCovers annually. Vandalism at other City sewer assets is not currently an issue. One incident of a homeless person entering the Stoddard Wells lift station compound was noted, however, they did not attempt to enter the station itself.

5. COMMUNICATION

According to the City, no other collection systems are known or permitted to pass through the City's system. The City's collection system discharges to the VVWRA interceptor line at a minimum of six locations. A Draft Memorandum of Understanding (MOU) between the City and other "member agencies", which would include VVWRA, was included as Appendix I of the 2009 SSMP. The MOU outlined a formal assistance agreement between signing parties for emergency response. According to the City, the MOU was never adopted. Mr. Flores and Mr. Laari agreed that both the City and VVWRA have an informal understanding to assist each other's agency in an emergency situation. Such assistance has been provided in past situations. Mr. Flores and Mr. Laari regularly communicate with each other regarding agency issues, and both have circulated emergency contact information to City and VVWRA personnel. In addition, Mr. Laari explained that frequent communication occurs between maintenance crew leaders and with the City's Public Works supervisor, Mr. Sam Arvizu.

Following the September 2015 sanitary sewer overflow (SSO) event, it was documented by the City in the technical report that a flow meter (VSD 3) located at one of the City's discharge points to the VVWRA interceptor was used to determine the volume of release[11]. It is understood that six inline flow meters are in place to quantify the City's discharge to the interceptor for billing purposes, but can also be used to monitor flow in real time. According to Mr. Laari, at the time of the spill, VVWRA was only using these meters for billing purposes and was not actively monitoring or reviewing City flow data. According to Mr. Flores, the City was unaware prior to the spill of the potential features the meters could provide. Following the SSO, VVWRA contracted with ADS Environmental (ADS) to facilitate the accessibility and alarm function of the flow data software. According to Mr. Laari, the software will trigger an alarm in the event that the volumetric flow changes by more than 25%. This system is currently being implemented and tested by ADS. Mr. Flores told us that City personnel will now have access to the software, and will be alerted directly to future flow disturbances.

6. COLLECTION SYSTEM MAINTENANCE

According to the 2009 SSMP, the City has set an inspection and cleaning cycle goal for the entire collection system of seven years. Mr. Flores explained that the City is more likely to meet a 10 year cleaning frequency. Approximately 91 miles of gravity sewer line was cleaned in the past 12 months (Questionnaire Question 8.12, page 13). According to Mr. Flores, the City's primary focus is on its known high maintenance areas. These segments are more frequently cleaned than others, and in some cases, were identified as a result of SSO events. Some of these high maintenance areas are identified in Appendix G of the 2009 SSMP. Mr. Flores pointed out that no repeat SSOs have occurred, which he attributed to increased cleaning activities in these areas. The City's secondary focus is on cleaning and visually inspecting via closed circuit television (CCTV), the entire collection system. Approximately 25.4 miles of gravity sewer line was visually inspected by CCTV in the past 12 months (Questionnaire Question 8.7, page 13). Mr. Flores indicated that an additional 30 – 35,000 linear feet of sewer line would be inspected as part of the Master Plan update.

Although the Questionnaire indicates the City maintains 4.08 miles of force main, Mr. Flores clarified that only approximately 1.1 mile of that is actively in use. The longest segment runs above grade across the Mohave River bed beneath a private rail trestle. The 8-inch ductile iron pipe has never been cleaned during its service life (1994 to present). According to the City, an air relief valve is in place on the exposed pipe and is replaced annually. Each of the six lift stations located at the SCLA have relatively short runs of force main in order to facilitate moving wastewater from buildings on the SCLA grounds, to City main lines in public right-of-ways. These force mains are also not regularly cleaned or inspected.

7. ROOT INTRUSION PROGRAM

The City has an ongoing root intrusion program established with a vendor, Duke's Root Control. The City has an annual budget of $65,000 dedicated to foaming activities in high priority areas. Mr. Flores explained that drought conditions have increased root issues, as decreased rainfall and watering have forced tree roots to find available water. The City

[11] City of Victorville SSO Technical Report. CIWQS SSO ID #818116. October 29, 2015.

typically observes root issues at lateral and joint connections. The current municipal code places ownership of the upper and lower lateral on the homeowner. The City will investigate lateral issues for the homeowner, sometimes providing CCTV to help identify potential issues. The City is currently attempting to update the ordinance allowing the City to take responsibility for the lateral from the main line to the property line. This action may occur by the end of the fiscal year.

8. FATS, OIL AND GREASE (FOG) PROGRAM

The City relies on the Code Enforcement division to perform food service establishment inspections and ensure compliance with local ordinances. Public Works regularly communicates with Code Enforcement to follow up on main lines in the vicinity of problematic FOG generators. Although not present in the morning interview session, Mr. Jorge Duran agreed to send me details regarding FOG enforcement throughout the City. I received additional information from Mr. Duran on December 18, 2015 regarding the FOG program (**Attachment 7 – FOG Enforcement Controls**). I had also asked Mr. Duran to provide details regarding enforcement actions taken by the City. On January 4, 2016, Mr. Duran responded that the City sent 55 notices of violations to local facilities from January 1, 2015 to January 4, 2016. 10 fines were issued during that time, six for failure to meet grease service requirements, and four for not having an active permit.

We ended the Pre-Field Inspection Conference at 1130.

PART B: FIELD INSPECTION

The field inspection started at 1230 on December 9, 2015. The inspection team included myself, Mr. Morales (RWQCB), Mr. PourGhasemi (RWQCB). We were accompanied by Mr. Flores, Mr. Longoria, Mr. Laari, Public Works Supervisor – Sam Arvizu, and lead collection system operator, Mitch Tucker.

A map of the City has been marked at the locations visited (**Attachment 8 – Inspection Location Details**). The following locations were visited in chronological order.

Note: The camera used for the inspection incorrectly displayed the timestamp on each photo. The date depicted on the photo is incorrectly advanced one day (displayed as December 10, 2015). In addition, the time is incorrectly advanced one hour. The time/date relationship can be confirmed in **Photo 30**, which was taken of Mr. Flores' cell phone during the inspection.

1. PUBLIC WORKS CORPORATE YARD & CALL CENTER

We started the inspection at the Public Works Corporate Yard located at 14177 McArt Road in Victorville. We were introduced to Ms. Myra Alvarez, one of two administrative personnel responsible for fielding business hour service calls. Ms. Alvarez showed me the process for entering a service request into the City's work order generation system – MUNIS. She explained that once entered into the system, she prints the work order, which is then filled out by field personnel and returned to administrative staff for close-out. She showed me an example work order for the SSO that occurred on November 25, 2015 (Event ID 819880). This particular example was a work order print-out used by Mr. Flores to assess the spill volume. At approximately 1250, we departed the Public Works facility for the first field location of interest.

2. MARCH 2015 SANITARY SEWER OVERFLOW LOCATION (EVENT ID 814130)

The first field location was the site of a previous SSO that the City was notified of on March 26, 2015 east of the intersection of Grant Street and Lambert Lane. The estimated spill volume was 214,450 gallons and the cause was

determined to be FOG related. At the time of inspection, the spill was categorized as a Category 2 in CIWQS; however, the technical report provided by the City clearly states that the overflowing manhole was discharging to a dry wash[12]. From aerial imagery, the wash appears to be tributary to the Mojave River, and therefore a water of the United States. Upon inspection, it was verified that the manhole discharge entered a tributary wash (**Photos 1** and **2**). When questioned about how the spill was categorized, Mr. Flores agreed that the spill should be a Category 1 and thought the City had already changed spill category. He said he would follow up with management (Note: I was unaware at the time of inspection that the Regional Board had previously (May 19, 2015) issued a Notice of Violation addressing the mis-categorization).

Post-Inspection Note: Mr. Gengler provided documentation that he requested the category change on December 10, 2015 via email to the CIWQS Help Desk (**Attachment 9 – Email Correspondence Regarding SSO #814130**). The change was completed on December 21, 2015.

Photo 1: Easement/dry wash area east of intersection of Grant Street and Lambert Lane (facing east). SSO manhole located at green marker and is currently buried to prevent vandalism.

Photo 2: Dry wash area that SSO entered. Photo facing north-east.

3. MANHOLE ID #106 ON COAD ROAD

Upon reviewing the hydraulic modelling included in the 2008 Sewer System Master Plan and Collection System Model, I was interested in visiting collection system locations identified as being hydraulically deficient. One such area is located immediately downstream of the previously visited spill location (Location #2). In this area, the sewer pipe transitions through several different pipe diameters, in some cases, reducing in size downstream (**Attachment 8 – Inspection Location Details**). Mr. Flores and Mr. Tucker believed the main line transitions from 21-inch to 15-inch at the manhole directly downstream of the SSO location. I requested to inspect this manhole to look for evidence of surcharge, however, it is buried in the sand within the easement and therefore, inaccessible. Mr. Tucker recommended inspecting a manhole further downstream on Coad Road that he believed might also have capacity issues.

Upon arrival, it was observed that residual solids had accumulated on the ground and bushes on the downstream side of the manhole cover (**Photo 3**), indicative of a possible SSO having occurred recently. Furthermore, residual paper solids had accumulated on the top rung of the manhole riser (**Photo 4**). When asked about the source of the solids, Mr. Tucker indicated they may be from a recent cleaning, but was unsure if this segment had recently been cleaned. Surface solids in the vicinity of the manhole cover did not extend more than 10 feet from the opening. At this location,

[12] Mainline Stoppage Report – Public Works Department, Sanitary Division. CIWQS SSO ID #814130. May 12, 2015.

the main line flow path transitions from east to north via a 90-degree turn. The manhole riser, collar and lid showed signs of severe concrete and steel corrosion. The manhole lid appeared to have old sealant near the edge, indicating attempts may have been made in the past to control odor emissions. The flow depth appeared to be at approximately 50% of full-pipe flow at the time of inspection, and the manhole bench was wet, possibly due to temporary surcharge events.

Post-Inspection Note: The City responded in an informal information request on January 21, 2016, providing historical cleaning maps for the Coad Road sewer main. The most recent cleaning event occurred in May 2015 and the City includes this section in an 8-month high maintenance cycle.

Photo 3: Manhole ID #106. Note solids debris on down gradient side of opening (top center).

Photo 4: Solids debris accumulation on top rung of manhole riser. Severe concrete and steel corrosion. Wet bench indicative of manhole surcharge.

4. NOVEMBER 2015 SANITARY SEWER OVERFLOW LOCATION (EVENT ID 819880)

The next location was the site of a SSO that was discovered by the City on November 25, 2015 near the apartment complex located at 16711 Chalon Road. At the time of inspection, the SSO report had been entered as a draft Category 2 spill in CIWQS, with an estimated spill volume of 85,680 gallons. The cause was determined to be vandalism. We arrived to find that the City had nearly completed repair of two manhole collar and ring assemblies (sonotube still in place), including the manhole where the SSO occurred (**Photo 5**). They had also installed manhole covers with five-point bolts to prevent theft/unauthorized access (**Photo 6**). The SSO location is immediately adjacent to a dry wash that is tributary to the Mojave River (**Photo 7**). I inquired as to why the SSO was entered in CIWQS as a Category 2 spill. Mr. Flores said that he did not believe the SSO location to be a drainage channel. I showed him that the parking lot for the apartment complex had installed a concrete v-ditch to convey storm water to the same dry wash that the SSO entered (**Photo 8**). I explained that any spill volume reaching a drainage channel that is tributary to waters of the United States is considered a Category 1 spill. In this case, I explained that the drainage channel is connected to the City's sanitary storm sewer system and eventually discharges to the Mojave River. Mr. Flores did acknowledge that some of the overflow reached the drainage channel and was not recoverable.

Post-Inspection Note: The City updated the SSO to a Category 1 spill in CIWQS and adjusted the volume to 73,440 gallons on December 16, 2015. They notified the Office of Emergency Services (OES) on December 16, 2015.

Photo 5: SSO location of manhole and newly constructed manhole ring and collar.

Photo 6: Five-point bolt down manhole lid.

Photo 7: SSO manhole location facing north (down gradient) towards drainage channel.

Photo 8: Affected drainage channel facing south. Storm water v-ditch shown center-left, which conveys apartment complex parking lot storm water to channel.

5. STODDARD WELLS ROAD LIFT STATION

We then travelled to the largest of the City's seven lift stations – Stoddard Wells Road lift station (**Photo 9**). The station operates a twin pump system with a maximum capacity of approximately 2,060 gallons per minute. Each pump is controlled using a variable frequency drive (VFD), however, the VFD settings are currently fixed at 42 Hertz (70% duty). The pumps are configured to alternate in operation in a 'fill and draw' operating mode (Note: the pumps can operate in tandem in the event the lead pump cannot draw down the wet well independently due to high inflow or pump failure). When the level in the wet well reaches the 'pump on' level, pumping initiates and ceases when the wet well level drops to the 'pump off' level. Level set points for pump operation and alarm conditions are input in the lift station controller (**Photo 10**).

The station also has a backup generator tied to an automatic transfer switch to allow for emergency power (**Photo 11**). Mr. Flores explained that the transfer switch is tested at least annually, and that staff have observed proper operation during occasional power outages. The generator is tested monthly. The built-in diesel fuel tank is refilled on an as-needed basis. I had Mr. Tucker determine the current level – ¾ full. He explained that they regularly check and send

fuel samples to a laboratory for testing to ensure it meets the proper fuel standards. The City is also prepared to bypass the station in the event of a complete station failure. An assembly is available at the station (**Photo 12**) to allow for a portable pump to be installed in the wet well that would allow bypass of wastewater directly to the force main. The City has performed the operation in the past to ensure its feasibility.

The station utilizes an aeration system to curb hydrogen sulfide corrosion both in the wet well, as well as the force main (**Photo 13**). Although odors were minimal, significant solids have built up in the wet well (**Photo 14**). Mr. Turner and Mr. Flores could not recall when the wet well was last cleaned, but believed it is should be scheduled soon. They noted the wet well is cleaned twice per year. In addition, isolation valves on the force main are exercised twice per year and check valves are cleaned as needed. The twin pumps (**Photo 15**) are also serviced as needed based in part on routine inspections involving checking motor amperage and noting any abnormal operating conditions. Two spare pump impellers were noted in the dry well (**Photo 16**), however, Mr. Flores said that the City does not maintain any other spare parts such as a spare pump or motor for the station. He said that the station is capable of operating on one pump even during peak flow conditions, and therefore the second pump acts as a redundant 'spare'. The station was also built to accommodate a third pump (**Photo 16**) if it became necessary.

Post-Inspection Note: The City responded in an informal information request on January 21, 2016, providing 91 'Daily Work Reports' documenting pump station inspections. No specific maintenance notes were recorded and the last documented wet well cleaning occurred on November 7, 2013.

Photo 9: Stoddard Wells Road lift station.

Photo 10: Lift station control panel.

Photo 11: Lift station emergency backup generator.	**Photo 12:** Lift station wet well aeration blowers for reducing hydrogen sulfide corrosion.
	
Photo 13: Lift station bypass connection for installation during emergency station bypass.	**Photo 14:** Lift station wet well. Significant solids accumulation noted.
	
Photo 15: Lift station dry well with twin pumps.	**Photo 16**: Lift station dry well optional third pump foundation and spare pump impellers.

6. MOJAVE RIVER CROSSING FORCE MAIN

After leaving the pump station, we drove approximately ¼ mile north-west along the Mohave River levee to a private railway crossing of the Mojave River. An 8-inch, ductile iron section of force main traverses the river beneath the rail tracks. We were informed by personnel that the original force main was upsized and replaced in 1994. The old force main was still in place adjacent to the new main. An air relief valve is located on the eastern side of the river (**Photo 17**). Downstream of the valve, a small pipe repair was noted (**Photo 18**).Mr. Flores and Mr. Tucker were not sure when the repair was made, but believed it to be related to corrosion. It was evident during the inspection that the repair showed signs of further corrosion and weathering (**Photo 19**). Similar condition was noted at another pipe segment downstream that appeared to be a flexible, slip joint (**Photo 20**). Due to water in the river basin, we were only able to inspect the force main on the eastern side of the Mojave River (**Photo 21**).

At approximately 1445, we observed active wastewater pumping through the force main from the Stoddard Wells

pump station. At first, the air relief valve functioned appropriately, discharging excess air/gas while the main line pressurized. Once full however, the valve was observed to leak wastewater to the rip rap beneath the bridge (**Photo 22**). I informed the City staff the leak is considered a Category 1 spill, and should be corrected and reported as soon as possible. Mr. Flores notified other City personnel to respond to the leaking valve immediately and informed us that the City had a replacement valve available. The leak persisted until we left the area at approximately 1500. It is estimated that approximately one to two gallons were released in our presence. It is unknown how long the valve has functioned improperly. The valve appeared to be weathered, and based on its failure, had exceeded its useful life.

Post-Inspection Note: The City responded in an informal information request on January 21, 2016, providing 91 'Daily Work Reports' documenting pump station inspections. No specific notes were recorded regarding force main or air relief valve maintenance or inspection.

Photo 17: Air relief valve located on 8-inch force main beneath private rail crossing over Mojave River.

Photo 18: Apparent force main repair – unknown age.

Photo 19: Apparent force main repair shows signs of corrosion and weathering.

Photo 20: Force main coupling. Appears to be a flexible, slip joint.

Photo 21: Private railway crossing over Mojave River (seen in distance).

Photo 22: Force main SSO in progress at air relief valve.

7. SEPTEMBER 2015 SANITARY SEWER OVERFLOW LOCATION (EVENT ID 818116)

The next location was the site of a SSO that was discovered by the City on September 13, 2015 in Turner Wash, down gradient of the intersection of Happy Valley Lane and Royston Street. The estimated spill volume was 11.36 million gallons and the cause was determined to be vandalism. The discharging manhole is located near the center of the wash, which is composed of deep, soft sand with sporadic vegetation (**Photo 23**). According to City staff, it is this fact that made the SSO response difficult with traditional equipment. Evidence of the spill was still present at the location – debris was still noted down gradient of the manhole, and berming was still partially in place that served as temporary containment (**Photos 24** and **25**). Mr. Turner opened the manhole for us and paper solids were noted on the step rungs of the riser (**Photo 26**). Flows were estimated at approximately 50-60% of full-pipe capacity.

Photo 23: Turner Wash facing south, upstream toward manhole.

Photo 24: September 2015 SSO manhole location. Photo facing north, downstream. Berming still in place from containment efforts during spill event.

Photo 25: Debris close-up appears to be from manhole SSO pictured in **Photo 24**.

Photo 26: September 2015 SSO manhole. Debris still visible on step rungs.

8. MANHOLE ID #111 SMARTCOVER

We then travelled to the intersection of Armagosa Road and Davis Street. Immediately north of this intersection, the sewer main within Amargosa Road enters a dirt wash/Los Angeles Department of Water and Power easement to the north (**Photo 27**). The City has installed a SmartCover at this location to monitor flow for irregularities to prevent SSO's that may enter the wash (**Photo 28**). We had Mr. Tucker open the manhole to view the SmartCover sensor, and test the intrusion alarm capability. The flow in the main line at the time of inspection was approximately 50% of full-pipe (**Photo 29**). The intrusion alarm notification was observed on the smart phones of all staff present during the field inspection (**Photo 30**).

Post-Inspection Note: The City responded in an informal information request that the manhole is identified as ID #111 in the City's Sewer Atlas Book 2, Tile X35, and ID# 115 in the City's GISMap.

Photo 27: Down gradient wash near intersection of Armagosa Road and Davis Street.

Photo 28: SmartCover installed at Manhole ID #111 near intersection of Armagosa Road and Davis Street.

Photo 29: Manhole ID #111 flow condition.

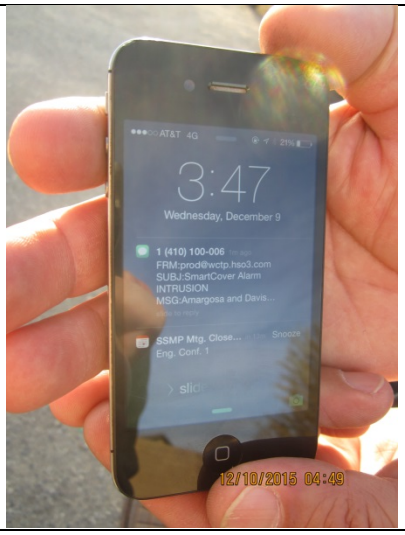


Photo 30: SmartCover intrusion alarm notification.

9. SCLA SEWER LIFT STATION #1

We then asked to see an example of the six lift stations operated and maintained by the City at the SCLA, formerly George Air Force Base. We were first taken to a control station for one lift station located at a building near Mustang Street and Phantom Way (**Photos 31** and **32**). The control station included visible alarms for pump or wet well level failure; however, no remote monitoring system or auto-dialer is currently installed. Emergency response relies on personnel within the SCLA facility to call the emergency numbers on the front of the control panel (**Photo 31**). According to Mr. Tucker, the typical inspection frequency at this station is performed twice per week with the Stoddard Wells pump station. Inspections include manual operation of the pump at the control panel and verifying that no existing alarm conditions are present. Mr. Tucker estimated that the wet well and pump are physically checked one or two times per year, but there is no scheduled preventative maintenance activities. I asked to see the wet well, to which Mr. Tucker explained that it is difficult to access and requires an extra person to remove and replace the cover. As an alternative, Mr. Tucker invited us to see another lift station with easier access.

Photo 31: SCLA Sewer Lift Station #1 control panel and emergency signage.

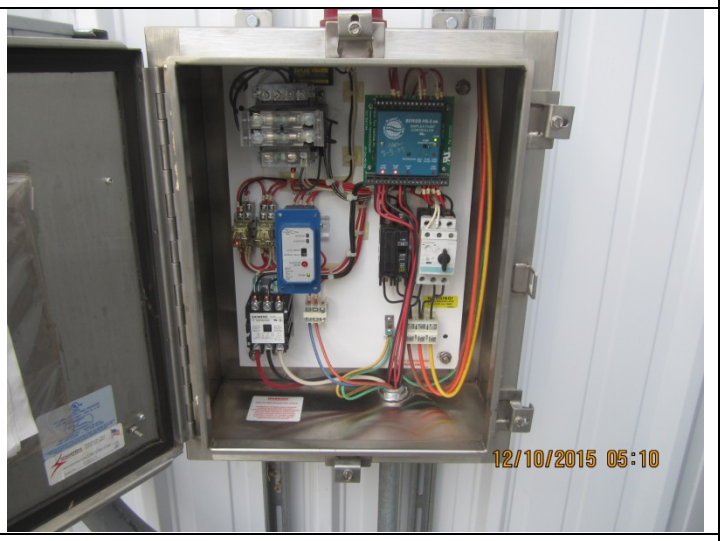


Photo 32: SCLA Sewer Lift Station #1 control panel.

10. SCLA SEWER LIFT STATION #2

We then travelled to a set of buildings located approximately ¼ mile north west of Sewer Lift Station #1. At this station,

the wet well and piping are mostly above grade and contained within a chain-link fenced compound. The station is currently operating one lift pump, but has the capacity and manifolding for one additional pump (**Photo 33**). We noted significant solids build up in the wet well. It was unknown when the wet well was last cleaned. Mr. Tucker explained that the station is typically inspected twice weekly with the other SCLA lift stations, however, maintenance is not regularly programmed unless it is required based on the results of inspection.

Photo 33: SCLA lift station wet well and pump control.

Photo 34: SCLA lift station wet well.

Photo 35: SCLA lift station discharge line and pump motor.

Photo 36: SCLA lift station manifold, which includes isolation valve and check valve for twin, parallel pump configuration.

We concluded the field inspection at 1620.

PART C: POST-FIELD INSPECTION WRAP-UP

Following the field inspection, we returned to the City Hall Engineering Division where we were re-joined by Mr. Gengler, Mr. Mathews, Mr. Longoria, Mr. Flores, Mr. Arvizu, and Mr. Laari. Jorge Duran (City Code Enforcement Manager) and Jay Cass (RWQCB) also participated in a brief post-inspection wrap-up at approximately 1650.

The inspection debriefing included the following:

1. We went through the initial scope and purpose of the inspection.
2. We thanked the City for their time and effort to complete the pre-inspection questionnaire, provide requested documents, and assist with the field inspection.
3. We summarized the known findings of the inspection team, which included the following:
    a. SSMP has not been completed and certified within five years of initial plan,
    b. Insufficient/obsolete capital improvement and rehabilitation/replacement program,
    c. Insufficient inspection and maintenance program for collection system,
    d. Insufficient anti-vandalism program,
    e. Inappropriate categorizing of SSOs,
    f. Excessive debris around Manhole ID #106 indicates possible SSO occurrence,
    g. Insufficient force main and pressure system inspections and maintenance,
    h. Inadequate inventory of spare, critical parts,
    i. Active SSO observed during inspection at force main,
    j. Inadequate cleanup following September 2015 SSO event.
4. We explained that further review of available documents and future requests for information may be necessary to complete our investigation and develop our findings.
5. We explained that an inspection report will be prepared by State Board staff, and the Regional Board will make decisions related to future enforcement activities with input from the State Board.

The inspection concluded at approximately 1730.

Attachment 1

Request for Information

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

November 10, 2015

(Via Certified Mail)
CERTIFIED MAIL
NO. 7015 0640 0006 0950 4575

Mr. Joseph Flores
Public Works Manager
City of Victorville
14343 Civic Drive
Victorville, CA 92392

SUBJECT: REQUEST FOR INFORMATION

Dear Mr. Flores:

The State Water Resources Control Board's Office of Enforcement and the Regional Water Quality Control Boards are conducting inspections of sewer collection systems to evaluate compliance with Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ[1] (SSS WDR), and the Amended Monitoring and Reporting Program (Amended MRP)[2].

As part of our evaluation, we are requiring certain agencies to complete the attached Sewer Collection System Pre-Inspection Questionnaire (Questionnaire) to increase our knowledge about system operations, maintenance, and management. All of this information will also be used to assist us with our statewide compliance and enforcement prioritization process underway for the Sanitary Sewer Overflow Reduction Program.

Complete the attached Questionnaire and save it to a compact disc (CD). Also save the additionally required documentation onto that CD (see Part 2 of the Questionnaire). Print the last page of the Questionnaire (the Certification page), and complete it in ink.

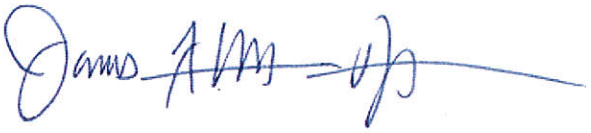
In addition to completion of the Questionnaire and associated documentation described above, please provide the following site-specific supplemental information covering your sewer program:

1. Records and/or narrative information to demonstrate City compliance with Provision D.13(iii) of the SSS WDRs, including, activities, procedures, and "best practices" employed to prevent:
   - Inflow and infiltration caused by any upstream tributary sewer system, including privately owned sewer service laterals
   - Fats, Oils, and Grease (FOG)
   - Stormwater from other collection system(s)
   - Vandalism

[1] http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf
[2] http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2013/wqo2013_0058exec.pdf

If you have any questions regarding this information request, please contact me by telephone at (916) 341-5841, or via email at jim.fischer@waterboards.ca.gov.

Sincerely,



James Fischer, P.E.
Special Investigations Unit
Office of Enforcement

cc: *(via email only)*

Lahontan Regional Water Quality Control Board
Mr. Mike Plaziak
Supervising Engineering Geologist
mike.plaziak@waterboards.ca.gov

Mr. Jahiel Cass
Senior Water Resource Control Engineer
jahiel.cass@waterboards.ca.gov

Ms. Catherine Poole
Senior Water Resource Control Engineer
catherine.poole@waterboards.ca.gov

Mr. Erik Taxer
Water Resource Control Engineer
erik.taxer@waterboards.ca.gov

Mr. Bryan Elder
Water Resource Control Engineer
Office of Enforcement
bryan.elder@waterboards.ca.gov

Attachment 2

Pre-Inspection Questionnaire

City of Victorville

SEWER COLLECTION SYSTEM

PRE-INSPECTION QUESTIONNAIRE

12/01/2015

PART 1 — DESCRIPTION

This Sewer Collection System Pre-Inspection Questionnaire (Questionnaire) includes questions specific to the requirements in the Sanitary Sewer System Waste Discharge Requirements Water Quality Order No. 2006-0003-DWQ (hereafter SSSWDR), and its accompanying Amended Monitoring Plan Order No. 2008-0002-EXEC (hereafter Amended MRP).

All of the questions in this Questionnaire must be answered by the Enrollee to demonstrate how the agency is complying with the SSSWDR and the Amended MRP. All responses provided in the Questionnaire along with the documentation required to be submitted by each Enrollee (see Part 3, Section 1) will be collected by Water Board staff at the time of the inspection.

PART 2 — INSTRUCTIONS

1. Complete all questions in the Questionnaire.
2. Save an electronic copy of the completed Pre-Inspection Questionnaire (in MS Word), and the other documentation required for your collection system (see Part 3, Section 1). Print the last page of this Questionnaire and sign it in ink.

PART 3 — REQUIRED INFORMATION

1 DOCUMENTATION

Please have the following documentation available during the inspection:

1.1 Sewer System Management Plan [(SSMP) [Sanitary Sewer System General Waste Discharge Requirements (SSSWDR), Sect. D.13] and any documents referenced within the SSMP. Also include documentation showing approval of the SSMP by your agency's local governing board (e.g., Board Resolution or other documentation).

1.2 SSMP Program Audit[1] [SSSWDR, Sect. D.13(x)], if not contained within your agency's SSMP

1.3 Sewer System Area Map [SSSWDR, Sect. D.13(iv)], if not contained within your agency's SSMP

1.4 Local Sewer Use Ordinance [SSSWDR, Sects. D.13(iii) and D.13(vi)], if not contained within your agency's SSMP

1.5 Evidence of Agency's SSO Field Response Documentation [SSSWDR, Amended MRP, B.5], if not contained within your agency's SSMP

1.6 Rehabilitation and Replacement Plan [SSSWDR, Sect. D.13(iv)(c)], if not contained within your agency's SSMP

1.7 Capital Improvement Plan (CIP) Schedule for System Evaluation and Capacity Assurance Plan (SECAP) [SSSWDR, Sect. D.13(viii)], if not contained within your agency's SSMP

2 Basic Information

2.1 Collection System Waste Discharge ID number (WDID) and Collection System Name: 6SSO11425

2.2 Collection System Main Point(s) of Contact (name, title, address, email, and telephone number): Brian Gengler, City Engineer, 14343 Civic Drive, bgengler@ci.victorville.ca.us, (760) 955-5158; Doug Mathews, Public Works & Water Division Head, 14343 Civic Drive, Dmathews@ci.victorville.ca.us, (760) 243-6332

[1] To satisfy SSSWDR, Sect. D.13(x), the SSMP Audit must occur at least every two years following the original approval date of the agency's SSMP by the local governing board. The SSMP Audit must measure the effectiveness and compliance of an Enrollee's SSMP.

2.3 Type of Sanitary Sewer System (select ONE of the following: Municipal, Park, School, Military, Hospital, Prison, Airport, Port, Other)
The City of Victorville is a Municipal Sewer System.

2.4 What is the population served by your agency's sanitary sewer system?

Approximately, 112,000

2.5 What is this fiscal year's budget for operation and maintenance sanitary sewer system facilities?

$2,322,750 Public Works $681,701 Engineering

2.6 What is this fiscal year's budget for capital expenditures for sanitary sewer system facilities?

The Capital Expenditures for this fiscal year's budget is $1,691,500.

For questions 2.7 - 2.10, please identify the total number of employees (technical and mechanical) for your agency's sanitary sewer system (including pump station operations) working within the different classifications listed below.

2.7 Entry Level (Less than 2 years experience)

Number of agency employees? 0

2.8 Journey Level (Greater than or equal to 2 years experience)

Number of agency employees? 8

2.9 Supervisory Level

Number of agency employees? 3

2.10 Managerial Level

Number of agency employees? 1.5

For questions 2.11 – 2.14, please identify the total number of employees who hold CWEA Certification <u>for Collection System Maintenance</u> for your agency's sanitary sewer system (including pump station operations) for the various Certificates and Grades levels listed below.

2.11 Grade I

Number of certified (Grade I Collection System Maintenance) agency employees: 3

Number of certified (Grade I Plant Maintenance Technologist) agency employees:0

2.12 Grade II

Number of certified (Grade II Collection System Maintenance) agency employees:2

Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees:0

Number of certified (Grade II Mechanical Technologist) agency employees:0

2.13 Grade III

Number of certified (Grade III Collection System Maintenance) agency employees:1

Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees:0

Number of certified (Grade III Mechanical Technologist) agency employees:0

2.14 Grade IV

Number of certified (Grade IV Collection System Maintenance) agency employees:1

Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees:0

Number of certified (Grade IV Mechanical Technologist) agency employees:0

2.15 Estimated Size Distribution of Assets

Diameter of sewer pipe	Gravity Sewers (miles)	Force Mains (miles)
6 inches or less	**245.70**	**0.46**
8 inches	**315.31**	**1.60**
9 - 18 inches	**79.45**	**2.02**
19 - 36 inches	**39.06**	**0**
> 36 inches	**4.31**	**0**
Unknown Diameter	**0**	**0**
Totals	**683.83**	**4.08**

2.16 For which portion of sewer service laterals is your agency responsible?

(If None, skip question 2.17.) None

2.17 Estimated total miles of sewer service laterals (upper and lower) for which your agency is responsible? **242.45 miles**

2.18 Number of sewer service lateral connections? **31,562**

2.19 Estimated total miles of easements within your sanitary sewer system? Unknown

2.20 What is your total easement sewer system cleaning production in miles/year? **Unknown, cleaned sewer mains in easements are not separated from sewer mains cleaned in public rights of ways**

2.21 What is your total gravity sewer system cleaning production in miles/year? **123 MILES (CALENDAR YEAR 2014)**

2.22 Does your agency own any separately enrolled collection systems? [Y/N] No

2.23 If yes to question 2.22, which collection system(s) does your agency own? N/A

Collection System name(s):

Collection System WDID(s):

2.24 Which wastewater treatment plant(s) (WWTPs) ultimately receive wastewater from this collection system?

Sole Owned Receiving Treatment Plant name(s): Victorville Industrial Waste Water Treatment Plant (IWWTP)

Receiving Treatment Plant WDID(s): 6B360911001

Joint Owned Receiving Treatment Plant name(s): Victor Valley Wastewater Reclamation Agency (VVWRA)

Receiving Treatment Plant WDID(s): 6B36019001

2.25 For question 2.24, does your agency own this/these WWTP(s)? [Y/N] Y

2.26 Does your collection system discharge into any other collection system(s)]? [Y/N] N

2.27 If yes to question 2.26, which collection system(s) receive wastewater from this collection system?

Receiving Collection System name(s): N/A

Receiving Collection System WDID(s): N/A

2.28 Do any upstream collection systems greater than 25,000 gallons/day (gpd) discharge into this collection system? [Y/N] N

2.29 If yes to question 2.28, which collection system(s) discharge into this collection system? N/A

Upstream Collection System name(s):

Upstream Collection System WDID(s):

2.30 Estimated Collection System Flow Characteristics for your collection system:

Average Daily Dry Weather Flow (MGD)	**Peak Daily Wet Weather Flow (MGD)**
Approximately 9.8	Unknown
Based on EDUs	N/A

2.31 How many pump stations are there throughout the sewer collection system? **7**

2.32 How many feet of above ground gravity pipelines are there throughout the sewer collection system? **1**

2.33 How many feet of above ground pressurized pipelines are located throughout the sewer collection system? **1203' (Mojave River Crossing Tressle Bridge) Measured through COV GIS**

2.34 How many air relief valves (ARVs) are located throughout the sewer collection system? **1**

2.35 How many siphons are there throughout the sewer collection system? **3 ea.: 1 – 8" main in a easement crossing the S.B. County Flood Control channel, south of Mojave Dr. & west of Village Dr., and 2 – 6" mains at Barranca Way between Sueno Ln. & Tawney Ridge Ln. flowing to the alley east of Village Dr.**

2.36 Specify the percentage of piping and the number of pump stations constructed in the following table below:
(note: total percentage must equal 100%)

2.37 Has your agency ever conducted any historic flow monitoring for the sewer system to evaluate hydraulic characteristics during weather conditions? [Y/N] Y

2.38 If yes to question 2.37 above, please list all specific dates when flow monitoring was conducted. [#] Temporary sewer monitoring was conducted for 27 consecutive days from January 7, 2015 through February 2, 2015.

2.39 Does your agency have any permanently installed flow monitor(s) in the collection system? [Y/N] Y

2.40 If yes to question 2.39 above, please specific total number of monitor(s) installed. [#] 6

Age	Source of Age Info. (records, estimated, etc.)	Gravity & Pressure Sewers (%)	Pump Stations[2] 25k Gal/day & Over (number of stations)	Pump Stations[1] Under 25k Gal/day (number of stations)
2000 - Present	GIS	41.1%	0	0
1980 - 1999	GIS	40.3%	0	1
1960 - 1979	GIS	12.3%	0	0
1940 - 1959	GIS	3.4%	0	0
1920 - 1939	GIS	0%	0	0
1900 - 1919	GIS	0%	0	0
Before 1900	GIS	0%	0	0
Unknown Age	GIS	2.9%	0	6
Totals		100%	0	7

[1] For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data. Age is date asset was originally constructed.

3 ORGANIZATION

Local Governing Board Information

3.1 [SSSWDR, Sect. D.13(ii)]: Is/are your agency's Legally Responsible Official(s) and Data Submitter(s) registration information up-to-date with the State Water Board? [Y/N] Y

3.2 [SSSWDR, Sect. D.13(ii)]: If your local governing board has an internet website, please specify the internet address here: www.ci.victorville.ca.us

3.3 [SSSWDR, Sect. D.13(ii)]: Please list the names and titles of each of your agency's current governing board members: Gloria Garcia, Mayor; Jim Cox, Mayor Pro-Tem; Jim Kennedy, Council Member; Ryan McEachron, Council Member; Eric Negrete, Council Member

Sewer System Management Plan Information

3.4 [SSSWDR, Sect. E.]: Is your agency's SSMP available on your agency's website? [Y/N] Y

3.5 [SSSWDR, Sect. E.]: If yes to question 3.4, please provide the internet address here: _www.ci.victorville.ca.us_____

4 SEWER SYSTEM ASSETS

General System Information

4.1 [SSSWDR, Findings 2 & 3]: Please specify the basis for the population served estimate in question 2.4 (e.g., official census data, estimated by agency, etc.)? Estimated by Agency

4.2 [SSSWDR, Sects. D.8, D.10]: What is the approximate size of the service area served by the sewer collection system for your agency, in square miles? **73.97 square miles**

4.3 [SSSWDR, Sects. D.8, D.10]: Please describe the terrain within your agency's sewer service area (Mountainous, Hilly, Flat, Valley, etc.)? Generally, the terrain is relatively flat with a gentle slope of about 1% towards the North West.

4.4 [SSSWDR, Sects. D.8, D.10]: Please specify what percentage of the collection system's flow comes from residential, commercial, industrial, and institutional sources. 65.4% Residential; 17.7% Commercial; 16.9% Multi-Family

Asset Mapping

4.5 [SSSWDR, D.13(iv)]: Has your agency identified and mapped all the gravity sewer line segments, public access points (manholes, lamp holes, rod holes, etc.), pumping facilities, pressure pipes and valves, and stormwater-related facilities? [Y/N] **Yes for the sewer collection system; the City IS Department is close to completing the stormwater GIS layer.**

4.6 [SSSWDR, D.13(iv)]: Does your agency currently have sewer system assets mapped in a Geographic Information System (GIS)? **YES**

4.7 [SSSWDR, D.13(iv)]: Does your agency currently have stormwater-related facilities mapped in GIS? [Y/N] **No, Stormwater collection system is soon to be entered in the City's GIS.**

4.8 [SSSWDR, D.8 and D.10]: What is the estimated number of gravity sewer line pipe segments located throughout the collection system? **Estmated at 9027 line segments.**

4.9 [SSSWDR, D.13(iv)]: Does your agency have a formal review process in place to ensure that any mapping issues noted by field staff or others are addressed? [Y/N] **Communication between field staff, Engineering and IS departments is on-going as field staff determine that mapping issues need to be corrected.**

4.10 [SSSWDR, D.13(iv)]: Please indicate the total number of public access points (manholes, lamp holes, rod holes, etc.) located within your sewer collection system. **8,606**

Sewer Service Laterals [SSSWDR, D.8, D.13(iv)]

4.11 Has your agency ever historically owned or maintained any portion of sewer service laterals? [Y/N or Unknown] Y

4.12 Does your agency have a voluntary sewer service lateral incentive program in place? [Y/N] N

4.13 How many incoming complaints did your agency receive for privately-owned sewer service lateral problems in the previous fiscal year? [# or Unknown] **78 - July 14 – Jun 15**

4.14 How many service calls did your agency respond to in the field for privately-owned service lateral problems in the previous fiscal year? [# or Unknown] **78 - July 14 – Jun 15**

4.15 Does your agency track all installation locations of sewer backflow prevention devices installed on sewer assets owned and/or maintained by your agency? N/A

4.16 If yes to 4.15, list number of known sewer backflow prevention devices installed on sewer assets owned and/or maintained by your agency. N/A

Pumping Facility Assets

For questions 4.17 – 4.34 below, refer to pump station answer from question 2.31 (above)

4.17 [SSSWDR, D.8, D.13(iv)]: Has your agency mapped each pump station's actual GPS coordinates? **YES**

4.18 [SSSWDR, D.8, D.13(iv)]: Has your agency conducted a risk assessment for each asset? [Y/N] N

4.19 [SSSWDR, D.8 and D.10]: How many of these assets have redundant pipelines installed? 0

4.20 [SSSWDR, D.8 and D.10]: How many have dedicated emergency stand-by power generators located onsite? [#] 1

4.21 [SSSWDR, D.8 and D.10]: Has your agency developed standard and emergency operating procedures for each asset in the event of a power and/or pumping failure? [Y/N] No

4.22 [SSSWDR, D.8 and D.10]: Has your agency determined the lowest hydraulic overflow point(s) and calculated the longest possible holding time(s) for each asset? [Y/N] No

4.23 [SSSWDR, D.6(iii) and (vi), D.8 and D.10]: Has your agency identified critical spare parts for each asset? [Y/N] No

4.24 [SSSWDR, D.6(iii) and (vi), D.8 and D.10]: For question 4.23, does your agency maintain the spare parts identified for each asset? [Y/N] No

4.25 [SSSWDR, D.8 and D.10]: How many facilities are located within 100 feet of a surface water, creek or drainage channel? **2**

4.26 [SSSWDR, D.8 and D.10]: How many are located within 20 feet of a storm drain inlet? **1**

4.27 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with audible and/or visual alarms located in public view to expedite notification to your agency in the event of an SSO? [#] **5 – operable**

4.28 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with an Auto Dialer Alarm System(s) for detecting pump failure and/or high wet well levels? [#] **1 – Stoddard Wells**

4.29 [SSSWDR, D.8 and D.10]: How many have a supervisory, control and data acquisition system (SCADA) installed and operational? [#] 0

4.30 [SSSWDR, D.8 and D.10]: For question 4.29, how many can be remotely operated? [#]0

4.31 [SSSWDR, D.8 and D.10]: How many pump stations display emergency notification signage, including agency contact information, in public view to expedite notification to your agency in the event of an SSO? [#] 7

4.32 [SSSWDR, D.8 and D.10]: Does your agency implement vandalism control efforts to discourage unauthorized access and/or vandalism to these assets? **7 – Lockable cabinets/gates**

4.33 [SSSWDR, D.8 and D.10]: How many pump stations have built-in pumping bypass capability for emergency use? [#] **1 – Stoddard Wells**

4.34 [SSSWDR, D.8 and D.10]: How many have electrical power connections installed to allow for the use of portable emergency generators? [#] 1

Force Main Sewer Assets

4.35 [SSSWDR, D.8, D.13(iv)]: How many sewer force mains are owned by your agency? [#] 7

4.36 [SSSWDR, D.8, D.13(iv)]: For the assets in question 4.35, has your agency conducted a risk assessment for each asset? [Y/N] No

4.37 [SSSWDR, D.8 and D.10]: For the assets in question 4.35, how many have a dedicated corrosion protection system(s) installed? [#] 0

4.38 [SSSWDR, D.8 and D.10]: For the assets in question 4.35, what is the total number of air relief valves installed? 1

5 FINANCIAL INFORMATION

Funding Sources and Revenues [SSSWDR, D.9]

5.1 Does your agency utilize an Enterprise Fund for services provided to the public? [Y/N] Y

5.2 If yes to question 5.1, what are the total estimated annual revenues generated from this fund? [#] $13.4 Million

5.3 If yes to 5.1, what is the current fund balance? [#] $19,874,943 as of 12/1/2015

5.4 Please provide a brief description of all sewer collection system funding source(s) (e.g., user fees, annual budget allocation, property taxes, etc.).
_____User Fees collected constitute the funding source._____

5.5 What is your agency's total number of billed sewer connections? [# OR Unknown] 40,043

5.6 What is your agency's total number of billed customers for sewer service? [# OR Unknown] 40,043

5.7 What is your agency's current average monthly household user fee for sewage collection only? [$ or Unknown] $26.89

5.8 For the answer in 5.7, what is your agency's sewer fee rate basis (e.g., measured flow, calculated flow, flat fee, etc.) Flat Rate per EDU

5.9 Has your local governing board approved any future sewer use fee increase(s)? [Y/N] Y

Operations, Maintenance and Capital Funds and Expenditures [SSSWDR, Sects. D.9]

5.10 How much did your agency spend in the last fiscal year for operations and maintenance activities (O&M) of sewer assets? [$] $909,429.63 Public Works; $554,989.31 Engineering

5.11 How much did your agency spend in the last fiscal year on capital expenditures for sewer assets (e.g., new pipelines or equipment)? [$] $40,082

6 LOCAL SEWER USE ORDINANCE [SSSWDR, D.13(iii) and/or D.13(vii)]

6.1 Does your agency have an adopted sewer use ordinance (Ordinance)? [Y/N] Y

If no to question 6.1, skip to question 7.1

6.2 Specify the date of last update/change of your agency's local Ordinance approved by your agency's local governing board. [DATE] 12/3/2013

6.3 Specify the time frequency in which the Ordinance is reviewed. [FREQ] when needed

6.4 Does your agency have legal authority within the Ordinance to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N] Yes

6.5 If no to question 6.4, does your agency have service agreements or other procedures to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N] N/A

6.6 Does the Ordinance ban inflow from stormwater sources? [Y/N] Y

6.7 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the building foundation to the property line (upper lateral portion)? [Y/N] Y

6.8 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the property line to the sewer main line (lower lateral portion)? [Y/N] Y

6.9 Does the Ordinance require testing and/or inspection of the sewer service lateral upon remodeling, renovations and/or transfer of property/residence? [Y/N] No

6.10 Does the Ordinance prohibit illicit discharges from service connections into the sewer? [Y/N] Y

6.11 Does the Ordinance require sewers and connections to be properly designed and constructed? [Y/N]Y

6.12 Does the Ordinance require proper maintenance, inspection and repairs of laterals? [Y/N]Y

6.13 Does the Ordinance limit the discharge of fats, oils and grease (FOG) and other debris that may cause blockages? [Y/N]

Y

6.14 Does the Ordinance give your agency the authority to inspect grease producing facilities? [Y/N] Y

6.15 Does the Ordinance reference the Uniform Building Code? [Y/N] Y

6.16 Does the Ordinance reference the California Plumbing Code? [Y/N] Y

6.17 Does the Ordinance give your agency the authority to inspect, maintain and repair assets located within sewer easements? [Y/N] Y

6.18 Does the Ordinance provide your agency with the proper authority to issue notices of violation (NOVs)? [Y/N] Y

6.19 If yes to question 6.18, how many NOVs has your agency issued in the past 3 years? [# or Unknown] Unknown, Code Enforcement was not available to get data.

6.20 Does the Ordinance provide your agency with the proper authority to issue enforcement penalties for violators? [Y/N] Y

6.21 If yes to question 6.20, how many enforcement penalties has your agency issued in the past 3 years? [# or Unknown] Unknown, Code Enforcement was not available to get data.

6.22 Does Ordinance provide your agency with the proper authority to ban connections and/or disconnect services for violators? [Y/N]

Yes, business will be shut down and per section 112.3 of CBC

6.23 If yes to question 6.22, how many actions has your agency undertaken in the past 3 years? [Y/N] 5

6.24 Does the Ordinance provide your agency with the authority to limit future development and/or building? [Y/N] No

6.25 If yes to question 6.24, how many actions has your agency undertaken in the past 3 years? [# or Unknown] N/A

7 CAPITAL IMPROVEMENT PLAN

7.1 [SSSWDR, D.9]: What is the approval date of your Sewer Capital Improvement Plan (Sewer CIP) by your agency's local governing board? [M/D/Y] 7/1/2015

7.2 [SSSWDR, D.8 and D.13(iv)]: For question 7.1, is your Sewer CIP available on the internet for public review? [Y/N] Y

7.3 [SSSWDR, D.8 and D.13(iv)]: If yes to question 7.2, please specify the internet address:
www.victorville.ca.us

7.4 [SSSWDR, D.8 and D.13(iv)]: What is the projected date of your next Sewer CIP update? [M/D/Y] 7/1/2016

8 OPERATIONS AND MAINTENANCE PROGRAM

Computerized Maintenance Management System (CMMS)

8.1 [SSSWDR, D.8 and D.13(iv)]: Does your agency use a computerized maintenance management system (CMMS) to generate work orders and track sewer maintenance, operations and management information? [Y/N] No

8.2 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.1, is CMMS data used for ongoing strategies to eliminate/reduce SSOs? [Y/N] N/A

8.3 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.1, is the CMMS data used to evaluate cleaning production rates? [Y/N] N/A

8.4 [SSSWDR, D.7, D.13(iv) and D.13(ix)]: If yes to question 8.1, does your agency use the CMMS information to provide data for tracking system trends, problems and/or performance? [Y/N] N/A

8.5 [SSSWDR, D.7, D.13(iv) and D.13(ix)]: If no to question 8.1, does your agency have a different method in place to provide data for tracking system trends, problems and/or performance? [Y/N] **Yes, MUNIS Work Order System**

Inspections, Operations and Management Activities

8.6 SSSWDR, D.7 and D.13(iv)]: What is the total number of focused problem areas ("hot spots") located throughout the collection system? [#]**104 – High Maintenance List**

8.7 [SSSWDR, D.8, D.13(iv)]: What percentage of all gravity sewers under you agency's responsibility have been visually inspected with Closed-Circuit Television (CCTV) to date? [#]**Approximately 3.7% (25.4 miles)**

8.8 [SSSWDR, D.8, D.13(iv)]: Specify most recent date of completion for answer listed in 8.7 above: **11/30/15**

8.9 [SSSWDR, D.8, D.13(iv)]: What percentage of CCTV video listed in answer 8.7 above has been reviewed and ranked? 100%

8.10 [SSSWDR, D.8, D.13(iv)]: What was your agency's total CCTV inspection production for past 12 months (miles)? 3.79 mi

8.11 [SSSWDR, D.8, D.13(iv)]: What is your agency's planned CCTV inspection production scheduled for the next 12 months (miles)? [# or Unknown] Unknown

8.12 [SSSWDR, D.8, D.13(iv)]: What was your agency's total gravity sewer collection system cleaning production (hydro flushing, mechanical and hand rodding) over the past 12 months (miles per year)? **480,541 ft = 91 Miles**

8.13 [SSSWDR, D.8, D.13(iv)]: What is your agency's total gravity sewer collection system cleaning production scheduled (hydro flushing, mechanical and hand rodding) for the next 12 months (miles per year)? 90 miles

8.14 [SSSWDR, D.8, D.13(iv)]: Does your agency have a method in use for reviewing and analyzing force main sewers and their components? No

8.15 [SSSWDR, D.8 and D.10]: Does your agency have a program to inspect and maintain air relief valves (ARVs)? **Yes. 1 air relief valve in system is replaced annually.**

8.16 [SSSWDR, D.8 and D.10]: How many ARVs are not accessible for inspection/maintenance? N/A

8.17 [SSSWDR, D.7 and D.13(iv)]: What was the total number of ARVs exercised and cleaned in past 12 months? 1

8.18 [SSSWDR, D.7 and D.13(iv)]: What is the total number of ARVs planned to be exercised and cleaned in the next 12 months? [# or Unknown] 1

8.19 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) inspected in the past 12 months? [# or Unknown] approximately 1200

8.20 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) scheduled to be inspected in the next 12 months? [# or Unknown] approximately 1200

8.21 [SSSWDR, D.13(iv)]: Does your agency visually inspect pipeline routes at least annually, and after major storms, earthquakes or other events that could damage these assets, to check for sink holes or leaks along force main(s)? [Y/N] Yes

8.22 [SSSWDR, D.13(iv)]: How many above ground crossings (if applicable) were inspected in the past 12 months? **1, crossing at the Mojave River**

8.23 [SSSWDR, D.13(iv)]: How many siphons (if applicable) were inspected in the past 12 months? **0 inspected, 3 Cleaned – Mojave Drive and Baranca Way**

8.24 [SSSWDR, D.13(iv)]: Does your agency have a process to identify areas subject to excess hydrogen sulfide corrosion? No

8.25 [SSSWDR, D.13(iv)]: Does your agency have a formal pipe grading process in place to identify pipe discontinuities? **Yes, City CCTV operators are qualified NASSCO Pipe, Laterals & MH Certified. Also, the on-going Sewer Master Plan Project will provide additional qualified inspections.**

8.26 [SSSWDR, D.13(iv)]: Does your agency require video (CCTV) inspections before and after cleaning to measure the effectiveness of these activities? Yes, When needed.

8.27 [SSSWDR, D.13(iv)]: Does your agency video (CCTV) inspect pipes after all SSO(s)? Yes

8.28 [SSSWDR, D.13(iv)]: Does your agency conduct smoke, dye or other tests to check for illicit connections? **Yes, dye tests are performed when needed; no smoke tests have been performed to date.**

8.29 [SSSWDR, D.13(iv)]: If yes to question 8.28, how many miles of sewer system were tested in the past 12 months? Unknown

8.30 [SSSWDR, D.13(iv)]: Does your agency use video (CCTV) to monitor discharger compliance for illicit connections? Yes

8.31 [SSSWDR, D.13(iv)]: If yes to question 8.30, list the total number of miles of video (CCTV) inspection conducted for this purpose in the past 12 months. Unknown

8.32 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have formal agreements in place to increase resources through established mutual assistance agreements with other agencies/contractors for wet weather episodes or for SSO response activities? No, however, verbal agreements are set between the agencies maintenance staff.

8.33 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have a program in place to identify areas with inflow and infiltration (I/I) ? [Y/N] No

8.34 [SSSWDR, D.13(iv) and D.13(viii)]: If yes to question 8.33, estimate the total number of miles identified by this program. [# or Unknown] N/A

8.35 [SSSWDR, D.13(iv)]: Does your agency have an active root control program in place? Yes

8.36 [SSSWDR, D.13(iv)]: If yes to question 8.35, please list the type(s) of control efforts in place (e.g., chemical, mechanical, etc.).

Chemical and Mecanical

8.37 [SSSWDR, D.13(iv)]: If your agency uses chemical(s) for root control, please list chemical(s) used. **Razorooter II, Diqust Dibromide (37%)**

Fats, Oils and Grease [SSSWDR, D.13(iv) and D.13(viii)]

8.38 Does your agency have a commercial FOG program in place? [Y/N] Yes

8.39 If no to question 8.38, has your agency justified in its SSMP why a FOG program is not needed? [Y/N] N/A

8.40 If yes to question 8.38, does your agency have a FOG Ordinance separate from the sewer use ordinance? [Y/N] No

8.41 If yes to question 8.40, please list the FOG Ordinance citation number: N/A

8.42 If yes to question 8.38, approximately how many food service establishments (FSEs) such as restaurants, schools, hospitals, jails, and convalescent homes are subject to FOG control. [#]Unknown, Code Enforcement was not available to get data.

8.43 If yes to question 8.38, what is the total number of FSE permits issued for FOG control? [#]Unknown, Code Enforcement was not available to get data.

8.44 If yes to question 8.38, what is the total number of dedicated FSE FOG inspectors? [#]2

8.45 If yes to question 8.38, how many FSE FOG inspections were conducted in past 12 months? [#]Unknown, Code Enforcement was not available to get data.

8.46 If yes to question 8.38, how many FSE FOG enforcement action(s) were initiated in the past 12 months? Unknown, Code Enforcement was not available to get data.

8.47 If yes to question 8.38, how many FSE FOG inspections are planned for the next 12 months? [#]Unknown, Code Enforcement was not available to get data.

8.48 Does your agency have a residential FOG program in place? [Y/N] No

8.49 If yes to question 8.48, briefly describe the program: N/A

Sewer Contract Services

8.50 [SSSWDR, D.8 and D.13(iv)]: Does your agency retain contract service(s) for sewer collection system maintenance, operations, and/or management? [Y/N] No

8.51 [SSSWDR, D.8 and D.13(iv)]: If yes to question 8.50, for services in excess of $10,000/year, please provide some basic information about these services in the table below: N/A

Contractor Name	Description (cleaning, root control, repairs, , etc.)	Frequency of Contract	Budget (annual $)

9 SSO EMERGENCY RESPONSE PROGRAM [SSSWDR, D.13(vi)]

9.1 Does your agency's SSO Emergency Response Plan incorporate procedures for pump stations/force main sewers? [Y/N] **Yes – per 2009 SSMP**

9.2 Does your agency have a dispatcher(s) within your agency to handle, dispatch and document incoming complaints from your sewer system customers? [Y/N] Yes

9.3 If yes to 9.2, does your agency utilize a dispatch radio system for notifying collection crews who respond to SSOs? [Y/N] Yes

9.4 If yes to 9.3, please list the frequency(s) in use for the dispatch radio system: 450 MHz UHF Band

9.5 Does your agency have standard operating procedures (SOPs) in place to test and document, at least once per year, the performance of its after-hours emergency notification system(s)? [Y/N] No

9.6 Does your agency provide and document any scenario-based SSO emergency response simulation training for collections staff at least on an annual basis to ensure staff are properly trained and prepared in the event of an SSO? [Y/N] No

9.7 If yes to 9.6, does this training include practical exercises including researching SSO start times and calculating the SSO volume spilled and recovered? [Y/N] N/A

9.8 Do your emergency operating procedures (EOPs) include requirements to determine the impact of an SSO, including accelerated or additional environmental monitoring? [Y/N] No

10 SSO REDUCTION PERFORMANCE AND MONITORING PROGRAM [SSSWDR, D.13(ix)]

10.1 Does your agency have a process in place to collect data to monitor performance of its SSMP and efforts in reducing SSOs? [Y/N] No

10.2 If yes to question 10.1, does your agency use the data collected to update SSMP program elements? [Y/N] No

11 COLLECTIONS STAFFING AND TRAINING

11.1 [SSSWDR, D.9]: What is the total number of dedicated sewer maintenance crews in place at your agency? [#] **Varies, typically 2 to 3 crews assigned to sewer maintenance activities daily.**

11.2 [SSSWDR, D.9]: For question 11.1, how many staff are typically in each maintenance crew? [#]**Two staff members are typically assigned to a cleaning crew; however at times three to four may be assigned depending on specific project assignment requirements; traffic control issues, confined space requirements, MH repair tasks, etc.**

11.3 [SSSWDR, D.9 and D.13(iv)(d)]: Does your agency have a program in place to identify and document the core competencies/capabilities of collections staff at least on an annual basis (examples include sewer line cleaning, point repairs, video (CCTV) inspection, pump station maintenance, excavation, utility line locating, etc.)? [Y/N] **Yes – Annual Evaluations**

11.4 [SSSWDR, D.9]: If yes to question 11.3, does this program identify gap(s) in competencies/capabilities of collections staff? [Y/N] Yes

11.5 [SSSWDR, E]: Does your agency require collections staff to review the SSSWDR and the agency's SSMP at least annually? [Y/N] No

11.6 [SSSWDR, D.9]: Does your agency use a workforce planning/retention program to ensure adequate future collections staff? [Y/N] No

11.7 [SSSWDR, D.8 and D.13(iv) and (vi)]: Does your agency provide initial and recurrent training to appropriate staff [including outside contractor(s)] regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N] **Yes, however the City has not utilized outside contractors for any SSO events; hence no training has been provided to outside contractors for SSO responses.**

11.8 [SSSWDR, D.8 and D.13(iv) and (vi)]: If yes to 11.7, what is the total number of individuals trained in the past 12 months. [#] 12

11.9 [SSSWDR, D.8 and D.13(iv) and(vi)]: For contracted sewer services, do your contracting specifications contain specific language requiring initial and recurrent training of contractor staff regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N] No

12 MAJOR EQUIPMENT INVENTORY [SSSWDR, D.4, D.7, D.8, D.13(iv)]

12.1 How many combination truck(s) (hydro flush/vacuum models) are owned and/or leased by your agency? [#]**3 sewer combination cleaning trucks are owned by the City of Victorville.**

12.2 For question 12.1, how many have a dedicated logbook(s) to document fieldwork activities? [#]**0. No log books for documentation of field work are maintained inside of combination cleaning trucks; however crew members complete Daily Work Reports after each work shift.**

12.3 How many hydro flusher(s) are owned and/or leased by your agency? [#]**0**

12.4 How many mechanical rodder(s) are owned and/or leased by your agency? [#]**1 mechanical rodder is owned by the City of Victorville for sewer laterals if needed**

12.5 How many video (CCTV) inspection vehicle(s) are owned and/or leased by your agency? [#]**1**

12.6 How many utility truck(s) are owned and/or leased by your agency? [#]**4 Pickups, 1 Van, 2 Expeditions**

12.7 How many portable sewage pump(s) are owned and/or leased by your agency? [#] **3 portable trash pumps owned by the City: 1 - 8" pump, 1 – 6" pump, 1 – 3" pump**

12.8 How many portable generator(s) are owned and/or leased by your agency? [#]**3 total - 1 - Honda 1000W, 2 - Light Towers with Generators**

12.9 Does your agency own equipment designed to block the storm drain system, in an emergency, to prevent untreated or partially treated wastewater from reaching surface waters? [Y/N] **Yes, one Enpac Spill Kit for Liquids, four PIG Drain Blocker Drain Covers, and heavy equipment such as backhoes and front end loaders.**

13 EXTERNAL COMMUNICATIONS PROGRAM

13.1 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating on a regular basis with the public regarding the development, implementation, and performance of its SSMP? No

13.2 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating with upstream or downstream satellite sewer system(s) connected to its collection system? [Y/N or N/A] No

13.3 [SSSWDR, D.11]: Does your agency participate in responding to Underground Service Alert(s) (USA) or other similar organizations to identify and mark sewer lines? [Y/N] Yes

13.4 [SSSWDR, D.7, D.13(iv), G, and Amended MRP]: Does your agency's communication program give the public the opportunity to provide input as your SSMP is being implemented? [Y/N] No

14 NOTIFICATION, REPORTING AND RECORD KEEPING

14.1 [SSSWDR, Amended MRP B(5)]: Are all the records required in the Amended MRP, B(5) ("Record Keeping") readily available for review by the Water Boards? [Y/N] **Records are maintained as stated in Order No. WQ 2013-0058-Exec; however not all records are stored in a single location. A number of records are maintained electronically on various computers, in various offices, while others are stored as a hard copy at various locations.**

14.2 [SSSWDR, Amended MRP, B(5)]: Does your agency maintain a list and description of all sewer-related complaints from customers for the past 5 years, including calls received after normal working hours? [Y/N] **Yes, sewer related complaints during Public Works business hours are stored electronically, while after hour complaints are stored hard copy.**

14.3 [SSSWDR, Amended MRP, B(5)]: If yes to question 14.2, does this include information for privately owned sewer laterals? [Y/N] **Yes**

14.4 [SSSWDR, G, and Amended MRP]: Does your agency have a quality assurance/quality control (QA/QC) procedure in place for review of technical information collected by field staff prior to certification of the SSO report(s) in the Water Board's online reporting system (CIWQS) by the Legally Responsible Official(s)? [Y/N] **Yes, the LRO(s) and a licensed Professional Engineer in Engineering review the SSO Draft report and questions areas of concern to understand the report prior to certification.**

14.5 [SSSWDR, G and Amended MRP]: Does your agency require crews to take photos of <u>all</u> SSOs? [Y/N] **Yes, usually photos are taken by more than one SSO responder during an event and mitigation/clean-up operation.**

14.6 [SSSWDR, G and Amended MRP]: If no to question 14.5, does your agency at least require crews to take photos of SSOs that result in backups into structures? [Y/N] **N/A**

14.7 [SSSWDR, G and Amended MRP]: Does your agency have a procedure(s) in place for collecting field information to assist in determining the actual SSO start time? [Y/N] **Yes, City staff utilizes various methods to best determine the SSO start times; question the reporting party and review flow meter readings when available.**

14.8 [SSSWDR, G and Amended MRP]: Does your agency use SOPs to estimate SSO volume spilled, recovered and not recovered, including estimation of cleanup water used? [Y/N] **No, Standard Operating Procedures have not been established; however personnel use various methods to best determine the estimated SSO spill volume; measurement of the spill puddle, visual comparison of the flow exiting the MH cover with the SSCSC MH Overflow Gauge, and flow meter readings when relevant.**

14.9 [SSSWDR, G and Amended MRP]: Does your agency regularly update initial reports given to the California Emergency Management Agency, local health department, and Regional Board as information develops regarding SSOs requiring notification? [Y/N] **No**

14.10 [Amended MRP, B.6]: Does your agency maintain water quality monitoring records as required by the Amended MRP, section B(6)? **No, SSO events to date have not reached the surface waters.**

15 SSO PREVENTION AND MITIGATION

15.1 [SSSWDR, D.13(ix)]: Does your agency generate SSO reduction performance metric(s) for its collection system for use in future planning? [Y/N] **No**

15.2 [SSSWDR, D.13(ix)]: Does your agency have a program in place to conduct periodic video (CCTV) inspections of areas throughout the collection system that have never been evaluated by video (CCTV) to date? [Y/N or N/A] **Yes, CCTV inspections of sewer mains and laterals have been scheduled by Service Requests and Work Orders.**

15.3 [SSSWDR, D.13(ix)]: Does your agency document meetings between O&M and source control staff, if applicable? [Y/N or N/A]

NO; however field meetings with City Code Enforcement officers have occurred on a as needed basis.

15.4 [SSSWDR, 8 and D.6]: Does your agency document meetings between O&M and engineering staff to discuss system problem areas and projects, if applicable? [Y/N or N/A] **Yes, regular bi-monthly meetings are held with City Engineering and Public Works management staff. All City projects and infrastructure issues are discussed. Special meetings are scheduled when needed to discuss specific issues such as the City's sewer and drainage collection systems; budgets, operations, maintenance, and capacity.**

15.5 [SSSWDR, 8 and D.6]: Does your agency hold post-SSO briefings with collections staff, management and others involved, to evaluate root cause of SSOs and document service changes necessary to be prepared in responding to SSOs in the future? [Y/N] **Yes**

15.6 [SSSWDR, 8 and D.6]: Does your agency pursue investigation of upstream satellite(s) or potential illicit dischargers as part of the SSO cause determination process? [Y/N] **Yes, when needed, City Code Enforcement officers are briefed on findings to coordinate with the satellite management members to address issues within the satellite sewer collection system.**

15.7 [SSSWDR, 8 and D.6]: Does your agency adjust sewer collection system cleaning interval(s) for problem areas based on review and analysis of each past SSO? [Y/N] **Yes, maintenance crew members report to the supervisor and/or leadworker of unusual findings in the collection system, when maintenance activities are performed. The information received from field crew members is evaluated and determined if a change in cleaning intervals is needed.**

15.8 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 12 months were preventable through more proactive maintenance? [# OR Unknown] **One SSO event may have been prevented if the maintenance cycle was performed within a shorter period. The City experienced three SSO events from December 2014 through November 2015. Two of the three events were caused by vandals removing the MH covers and depositing debris into the collection system. One event was directly caused by an extended maintenance period.**

15.9 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 4 years occurred at repeat locations? [# OR Unknown] **NO SSO events have occurred at repeat locations over the past four years.**

15 DECLARATION

I, Brian Gengler , the approved Legally Responsible Official (LRO) of collection system (name and Waste Discharge ID#) City of Victorville 6SSO11425 certify under penalty of law that based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information in this Pre-Inspection Questionnaire (Version 1.0) is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine or imprisonment, for knowing violations.

_____ 12/2/2015

Legally Responsible Official Signature **Date**

15 DECLARATION

I, Brian Gengler, the approved Legally Responsible Official (LRO) of collection system (name and Waste Discharge ID#) City of Victorville 6SSO11425 certify under penalty of law that based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information in this Pre-Inspection Questionnaire (Version 1.0) is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine or imprisonment, for knowing violations.

Brian Gengler

Legally Responsible Official Signature

12/2/2015

Date

Attachment 3

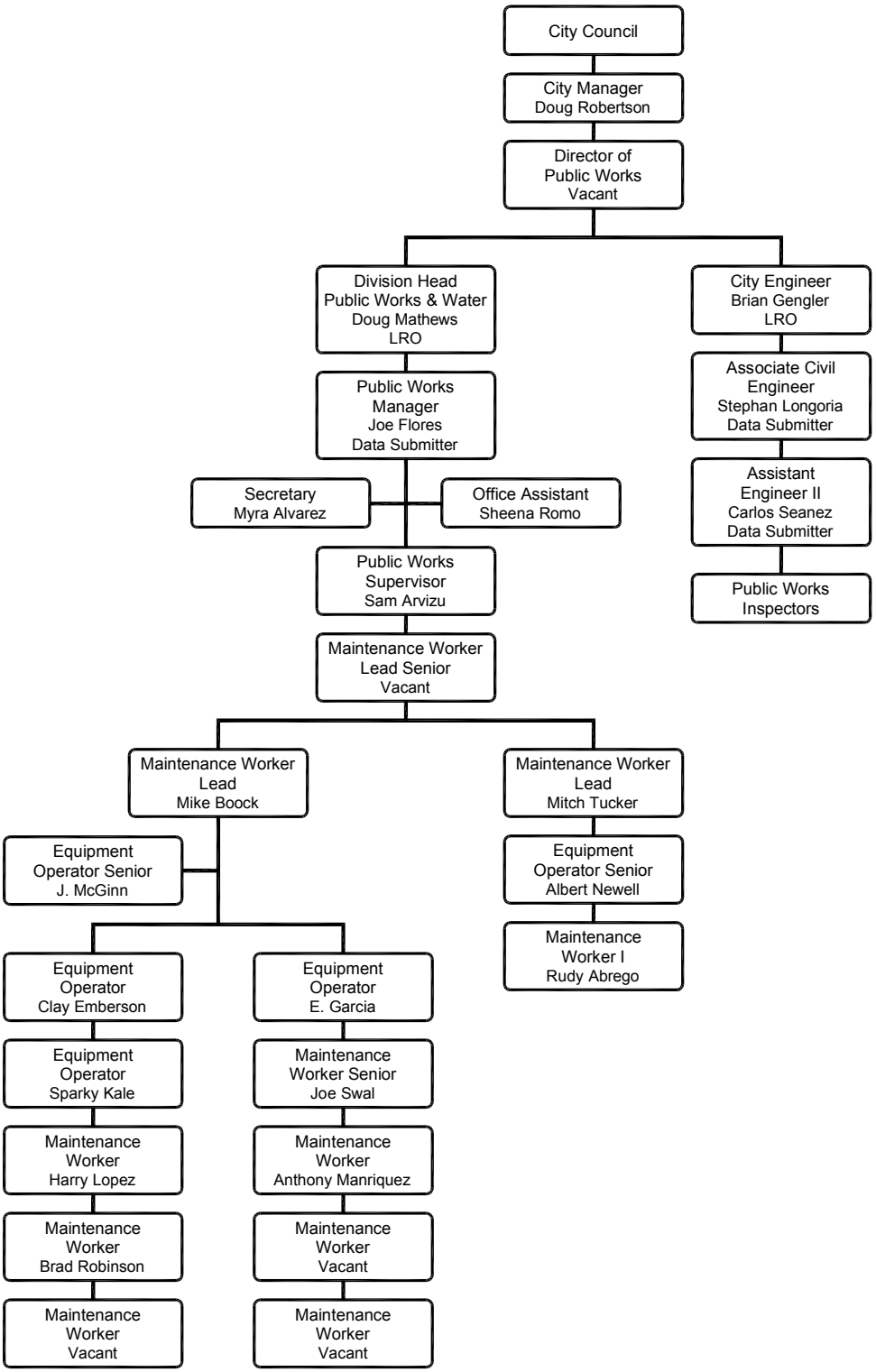
Sign-In Sheet

12/9/15

Name	Title	Agency	email	Phone	Phone
Bryan Elder	WRCE	SWRCB	bryan.elder@waterboards		(916) 321-8363
LATIF LAARI	Regulatory Compliance Supervisor	YVWRA	LLAARI@YVWRA.COM		(760) 954-5083
Joe Flores	PWS Manager	City Victorville	jFlores@victorvillecа.gov		760/243-6380
STEPHAN LONGORIA	ASSOCIATE CIVIL ENGINEER	CITY OF VICTORVILLE	SLONGORIA@VICTORVILLECA.GOV		(760) 243-1946
DOUG MATHENS	DIVISION HEAD PW & WATER	"	"	DMATHENS@ VICTORVILLECA.GOV	760 243-6332
Brian Gengler	City Engineer	City of Victorville	760-955-5156 bgengler@ victorvilleca.gov		
Francis "Mike" Coony	Sanitary Engineer	Regional Board Lahontan	760-241-7353 mike.coony@waterboards.ca.gov		
John Morales	WATER Resource Eng:	Lahontan Regional Board	(760) 241-7366 jmmorales@waterboards.ca.gov		
CEPHAS HARR	W.R CE	LAHONTAN RWQCB	760 241 3408 CEPHAS.HARR@WATERBOARDS.CA.GOV		

Attachment 4

Organization Chart



City of Victorville
Public Works Department
Sanitary Division
Organizational Chart

December 2015

Attachment 5

Completed Capital Improvement Projects

Projects in the City of Victorville from 2008 to Present

SCLA SEWER TRUNKLINE – 15 Miles of trunkline sewer around the new City of Victorville Sewer Treatment Plant. The system had the industrial trunkline coming from DPSG (Dr. Pepper Snapple Group) to the treatment plant. The system was all 27" and 21" in size built in 2009-2010. It included casings under runways and taxiways and the sewer connected from the treatment plant to an existing trunkline near Brucite Road and Mojave Drive. The total project cost $8.5 Million.

Mojave sewer emergency - During a storm in 2010 a sewer line floated to the surface and was repaired with concrete encasement and new line between two manholes. The project cost $150,000

Nisqualli Interchange – This project relocated existing trunkline and extended sewer surrounding the new Nisqualli Freeway Interchange. The cost was approximately $1.4 Million.

Center Street Sewer – This was a high maintenance area of 10" that was backing up. We replaced approximately 2000 lf of 10" and rep[laced it with 12" PVC. There were unknown fittings that were causing hydraulic issues upstream. We uncovered a buried 90 outside of the manhole. The cost was approximately $300,000

Amethyst Diversion – This project diverted flow from going east to north. The sewer east of this was surcharging and causing issues with residential lateral backup. Drop manholes were installed and sewer moved to a different trunkline, alleviating the downstream issue. Apprximate cost $120,000

Pluto Drive – Extended sewer across bear valley road for possible future connection. This was done strictly to prevent near future trenching across Bear Valley Road. This was done in conjunction with a new 60" RCP storm drain line. Approximate cost $20,000

Attachment 6

2015 Capital Improvement Project Plan

Capital Improvement Projects
Sewer Summary

Projects	Funding Source	Project	2015 Proposed Budget	FY 15/16	FY 16/17	FY 17/18	FY 18/19
El Evado Sewer main							
North of Tawney Ridge Ln	425	77029	-	400,000	-	-	-
FBOP Lift Station							
Right of Way	425	74079	-	-	40,000	-	-
Design & Construction	425	74079	-	-	2,700,000	-	-
High Maintenance Locations - Evaluate Problems & Correct	425	77022	250,000	250,000	250,000	250,000	250,000
Master Plan Main Projects	425		250,000	1,000,000	1,000,000	1,000,000	1,000,000
Old Town Area Sewer Reha-bilitation	425	77016	100,000	100,000	100,000	100,000	100,000
Santa Fe Channel Main Coad Rd to Ottawa St							
Protect manholes from erosion	425		150,000	-	-	-	-
Various Diversions	425	77018	100,000	-	-	-	-
Citywide Sewer Master Plan	425	77001	150,000	50,000	-	-	-
Sanitary Related Equipment	425	70013	20,000	20,000	20,000	20,000	20,000
Sewer Root Treatment	425	70006	65,000	65,000	65,000	65,000	65,000
Work order software	425	New	250,000	-	-	-	-
TOTAL FOR SEWER			**1,335,000**	**1,885,000**	**4,175,000**	**1,435,000**	**1,435,000**

Attachment 7

FOG Enforcement Controls

Elder, Bryan@Waterboards

From: Jorge Duran <JDuran@CI.VICTORVILLE.CA.US>
Sent: Friday, December 18, 2015 10:39 AM
To: Elder, Bryan@Waterboards; Joe Flores; Stephan Longoria; Doug Mathews; Brian Gengler
Subject: RE: City of Victorville Collection System Audit/Inspection Follow-Up

Hi Bryan,

Below is an outline of our FOG enforcement controls:

FOG monitoring and enforcement is conducted by Code Enforcement, Business License and our Building Division along with proactive monitoring conducted by Public Works and Sanitation staff when monitoring/ inspecting sewer lines.

Business License Tasks: Food businesses are identified at the business license application stage. This allows the City to establish FOG controls at the onset of the business thus requiring the license application to be routed for permit approval and issuance completed by Code Enforcement.

Building Division Tasks: New construction projects with interceptors are identified and inspected. Occupancy of these new locations are identified through our Business License Division which will trigger FOG permit requirements.

Code Enforcement Tasks: Code Enforcement issues permits, sets grease trap/interceptor service intervals, processes service manifest for permit compliance verification, conducts trap/ Interceptor inspections, assesses and adjusts service intervals accordingly, issues compliance notices and fines for lack of service, documentation or permits, takes action on urgent overflow situations which may include ordering an establishment to vacate and close business operations until such situation is abated.

Permits: Bi- Annual permits are issued.

Service Intervals Used: 30, 60, 90, 120, 180, 210,270,365 days. Determination of service intervals consist of: trap/ interceptor size, type/ nature of the food establishment, prior use and service intervals at the proposed location and intervals imposed to similar businesses. Service Interval Adjustments are made at the recommendation of the grease servicer, the business owner or the code enforcement officer and approved by the Building or Code Enforcement Official.

Monitoring: One Code enforcement Officer is assigned this task/ case type. The permit is administered through the City's permitting database. An exception report is generated listing establishments requiring service manifest verification, vacant locations or permit renewals. Manifest are received by code enforcement admin staff and are updated in the database. Grease removal service providers must possess a city business license in good standing. Notices stated below are sent to the business establishments to initiate compliance.

Service/ Permit Notices: Two are sent: Past Due Notice and Final Notice.

Enforcement Process: 5 days after issuance of the Final Notice, the grease permit case record is converted into a code enforcement action which initiates an onsite inspection, triggers the issuance of a written Notice to Violation and provides additional administrative actions and appeal processes to businesses impacted by our enforcement actions.

Enforcement Inspection and Assessment: If the Officer verifies that the trap/ Interceptor is nearing or at full capacity, an order to service within 24 hours is issued- stated in the NOV. If the trap/ interceptor is not at a potential full or over flow

condition however, timely scheduled service has simply not taken place, an order to service the unit within 5 days is issued- stated in the NOV.

Fines: Fines are issued at the follow up inspection which occurs accordingly as described above. Fines are issued to the business owner and follow our administrative fine schedule: $100 first offence, $200 second, $400 third. Each day constitutes a new and separate offense. Each violation type is a citable offence (Ex: lack of permit and lack of service). Fines double if unpaid after 30 days. The issuance of a misdemeanor fine (Notice to Appear) is also available as an alternative option to the administrative fine- typically issued in person to the property or business owner after repeat offences cited prior through the administrative citation process. The City attorney may also initiate action through a long form criminal complaint.

Summary Abatement Measures: The city will use a grease removal service company if conditions warrant such immediate action to protect public health or if the business establishment has ignored our fines. Preferably, a court order is quickly obtained to sustain our abatement actions and recover incurred City expenses which may also be assessed on the property. Disconnection order may also be issued to the business.

Please let me know if you need further clarification or additional information.

Thank you
Jorge.

From: Elder, Bryan@Waterboards [mailto:Bryan.Elder@Waterboards.ca.gov]
Sent: Wednesday, December 16, 2015 11:40 AM
To: Joe Flores; Stephan Longoria; Doug Mathews; Brian Gengler; Jorge Duran
Cc: Morales, John@Waterboards; Cass, Jehiel@Waterboards; mike.cooney@waterboards.ca.gov; Hurr, Cephas@Waterboards; PourGhasemi, Ghasem@Waterboards
Subject: City of Victorville Collection System Audit/Inspection Follow-Up

All –

Thank you all for your time and participation in the audit last week. Please extend my appreciation to Latif Laari for his participation on behalf of VVWRA as well. As we discussed at several points during the morning and afternoon portions of the audit, there was some additional information I requested to be provided later. I mentioned at the conclusion that I would send an email request to follow-up on areas I needed more clarification. Below is the list I generated from my notes.

1. Updated organization chart
2. List of projects completed from 2008 to present
    a. If possible, provide brief project description and spend
3. The manhole identification (name or number) at the second field location on Coad Road
    a. Pipe size (appears to be approx. 12-inch, but I did not confirm this in the field)
    b. Any documented cleaning/CCTV for this location
4. Most recent documented wet well cleaning event at Stoddard Wells pump station
5. Any recent (1-2 years) documented inspection/maintenance of Stoddard Wells force main and air relief valve
6. The manhole identification (name or number) at the smart cover at Amargosa Road and Davis Street
7. Any recent (1-2 years) documented inspection/maintenance of airport pump stations
8. Details regarding enforcement actions taken by code enforcement against food service establishments

Also, I wanted to remind the City that the SSO that occurred in March 2015 (~215K gallon) is still categorized as a Category 2 spill. It was my understanding in the field that the City mis-categorized this spill by accident and thought they had changed it. As of today, this has still not been changed. As a side note, I appreciate the re-categorizing of the more recent spill in November 2015. Thank you all again, and I look forward to your responses.

Sincerely,

Bryan Elder, PE
Water Resources Control Engineer, Special Investigations Unit
Office of Enforcement
State Water Resources Control Board
1001 I Street, 16th Floor, Sacramento, CA 95814
bryan.elder@waterboards.ca.gov
Ph. 916.327.8363
Fax: 916.341.5896
http://www.swrcb.ca.gov/water_issues/programs/enforcement/

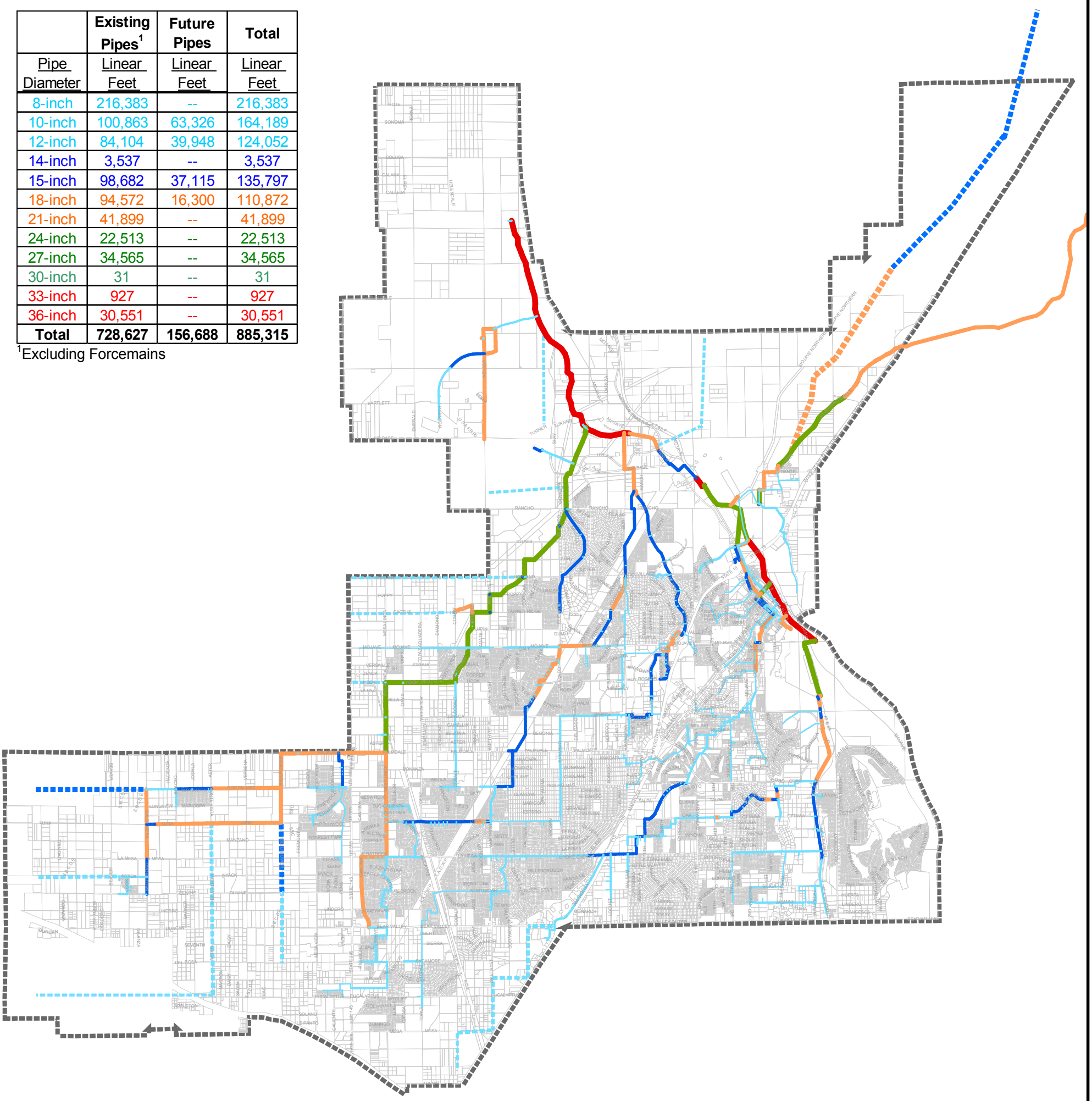
Attachment 8

Inspection Location Details

Summary of Modeled Existing
and
Projected Future Pipes

Pipe Diameter	Existing Pipes[1] Linear Feet	Future Pipes Linear Feet	Total Linear Feet
8-inch	216,383	--	216,383
10-inch	100,863	63,326	164,189
12-inch	84,104	39,948	124,052
14-inch	3,537	--	3,537
15-inch	98,682	37,115	135,797
18-inch	94,572	16,300	110,872
21-inch	41,899	--	41,899
24-inch	22,513	--	22,513
27-inch	34,565	--	34,565
30-inch	31	--	31
33-inch	927	--	927
36-inch	30,551	--	30,551
Total	**728,627**	**156,688**	**885,315**

[1]Excluding Forcemains



Legend

Wastewater Collection System

Pipe Lines Sizes

- 4 - 8 inch
- 9 - 12 inch
- 13 - 15 inch
- 16 - 21 inch
- 22 - 30 inch
- 31 - 36 inch
- Projected Future Pipes
- Existing Pipes

Planimetric

- Parcels
- Sphere of Influence

N

4,000 2,000 0 4,000 Feet

DRAFT FINAL

EarthTech
A tyco International Ltd. Company

CITY OF VICTORVILLE
DEPARTMENT OF ENGINEERING

Figure 5-2

Existing and Future Sewer Network

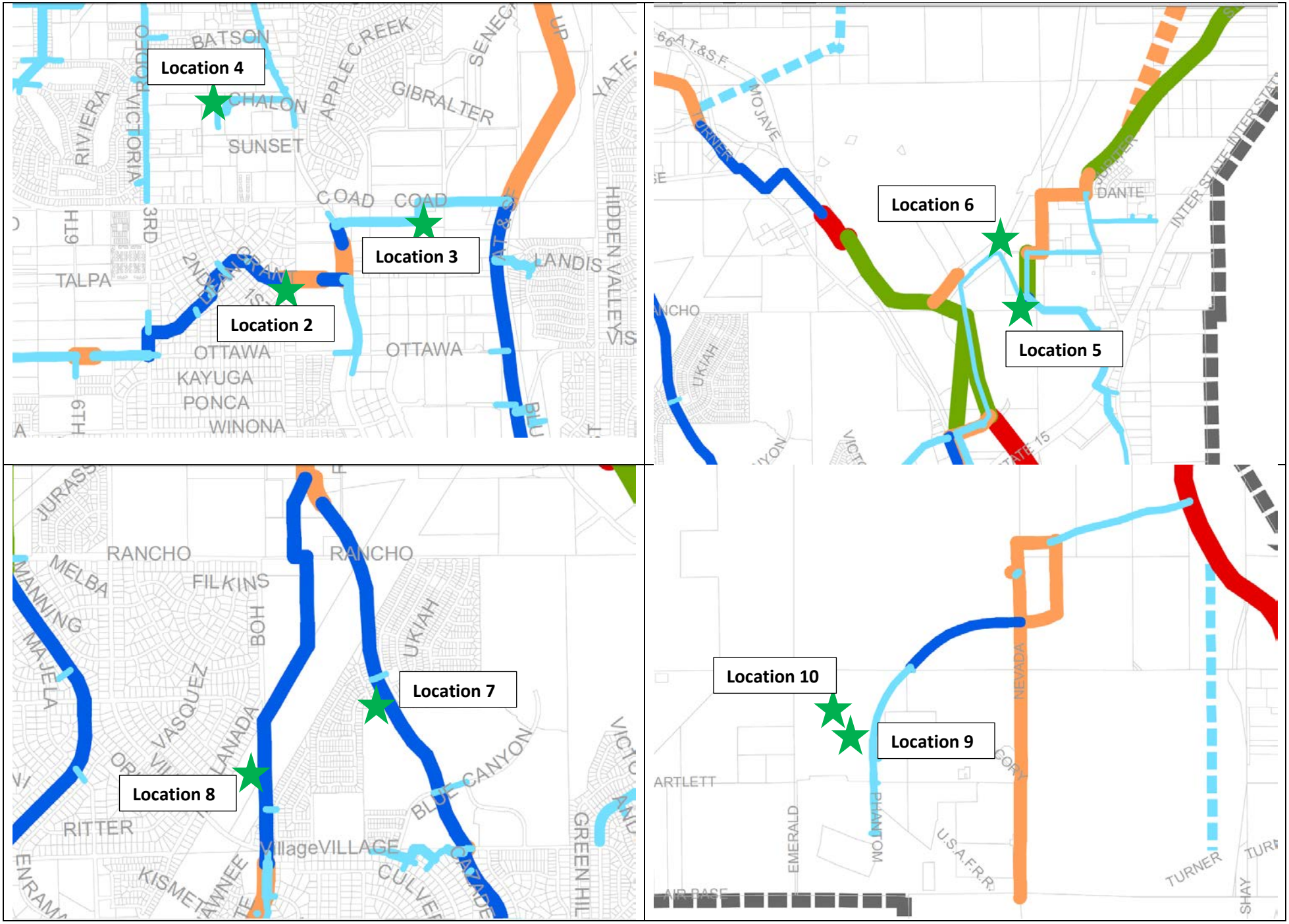
Sewer System Master Plan
City of Victorville, CA

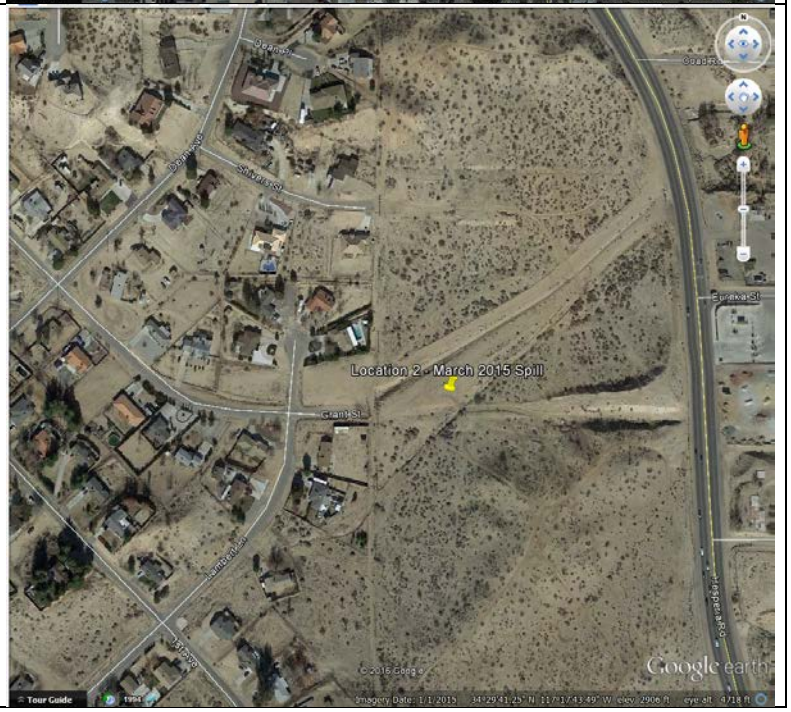
DATE: March 27, 2008

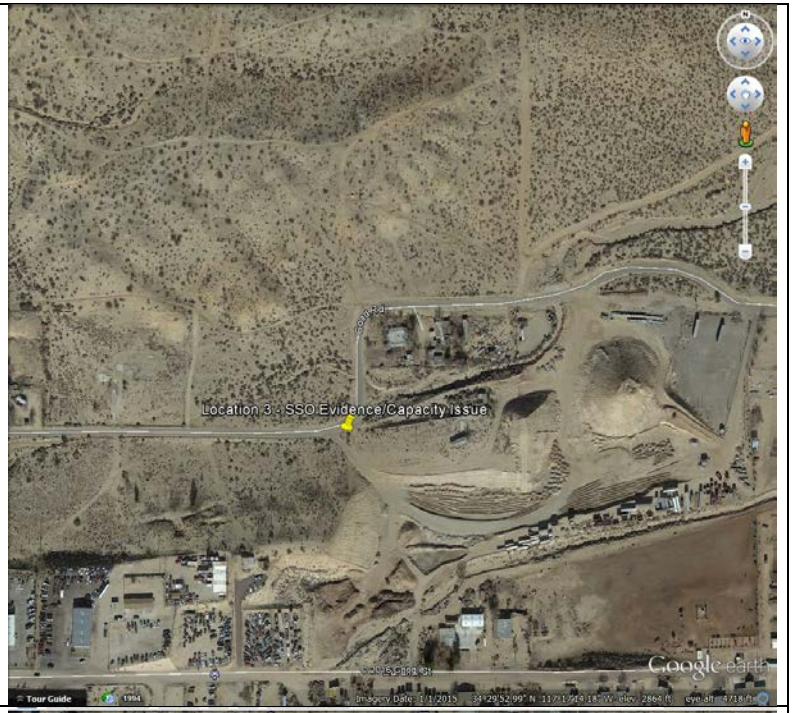
EARTH TECH INC., LONG BEACH, CA

TAB NO.

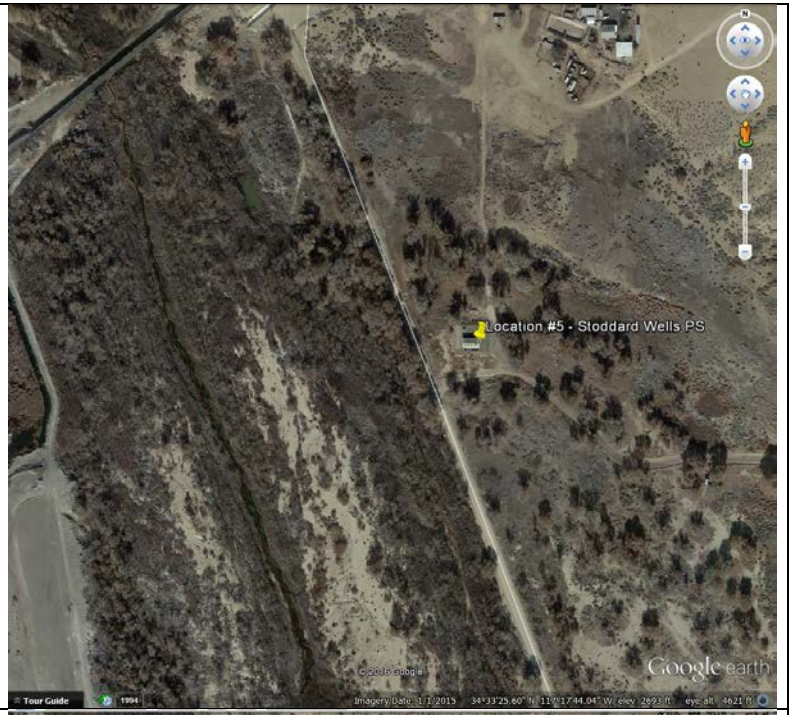
C:\Projects\Victorville\ArcGIS\final\5-2.mxd


Location 4
Location 3
Location 2
Location 6
Location 5
Location 7
Location 8
Location 10
Location 9
BATSON
CHALON
SUNSET
GIBRALTER
APPLE CREEK
RIVIERA
VICTORIA
TALPA
OTTAWA
KAYUGA
PONCA
WINONA
LANDIS
HIDDEN VALLEY
DANTE
MOJAVE
UKIAH
RANCHO
MELBA
FILKINS
MANNING
VASQUEZ
RITTER
BLUE CANYON
NEVADA
ARTLETT
EMERALD
PHANTOM
TURNER

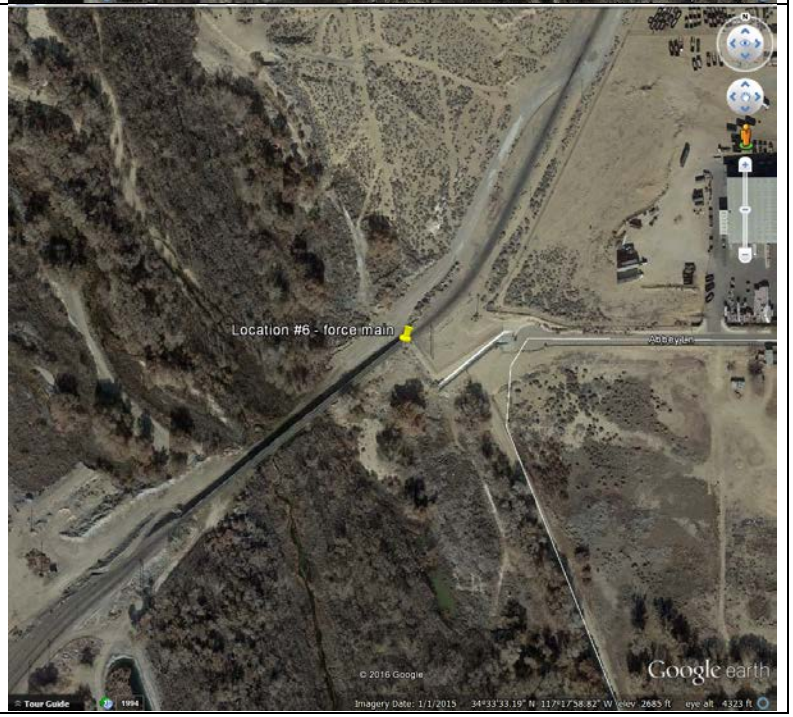
Location 1 – Public Works Corporate Yard & Call Center	
Location 2 – March 2015 Sanitary Sewer Overflow Location	

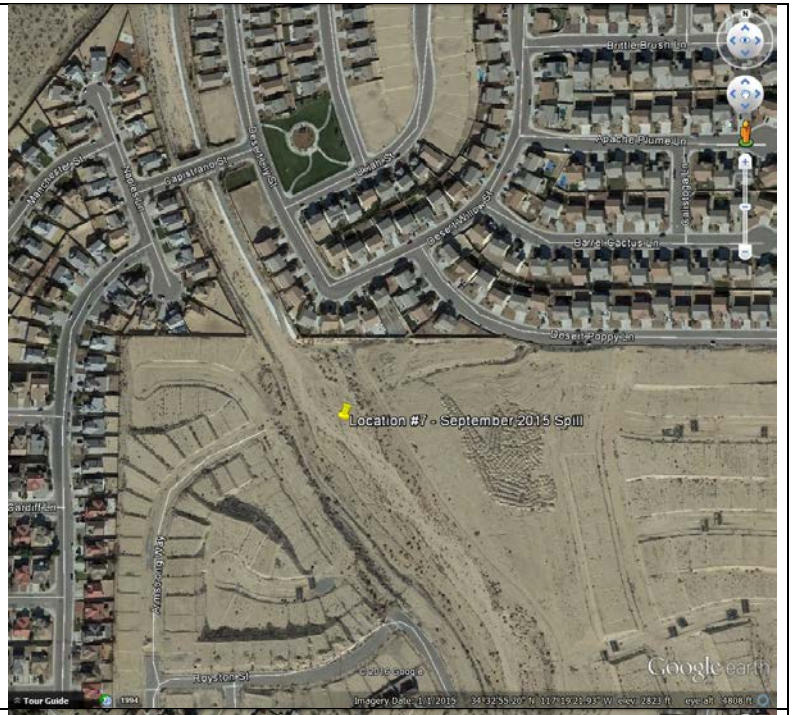
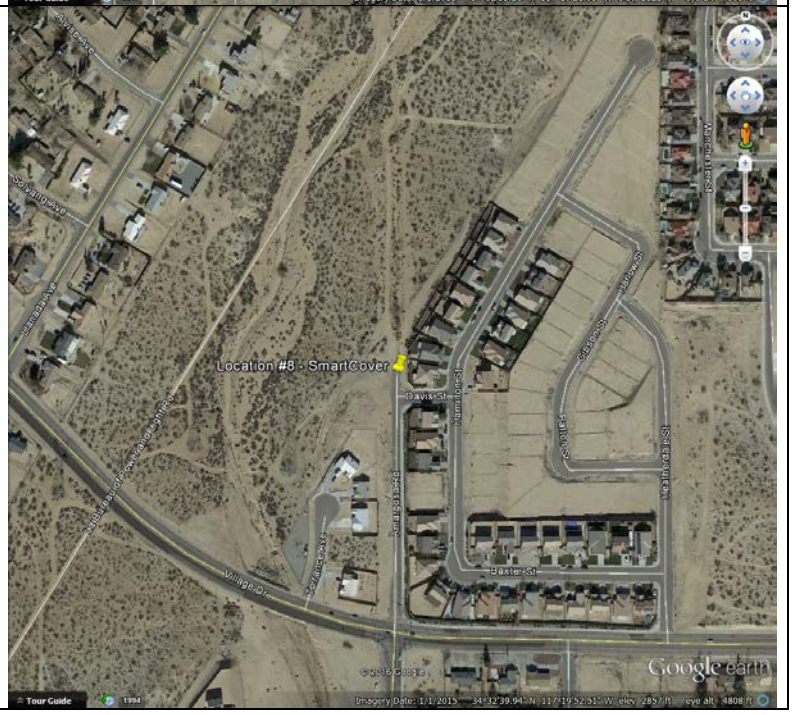
Location 3 – Manhole ID #106 on Coad Road	
Location 4 – November 2015 Sanitary Sewer Overflow Location	

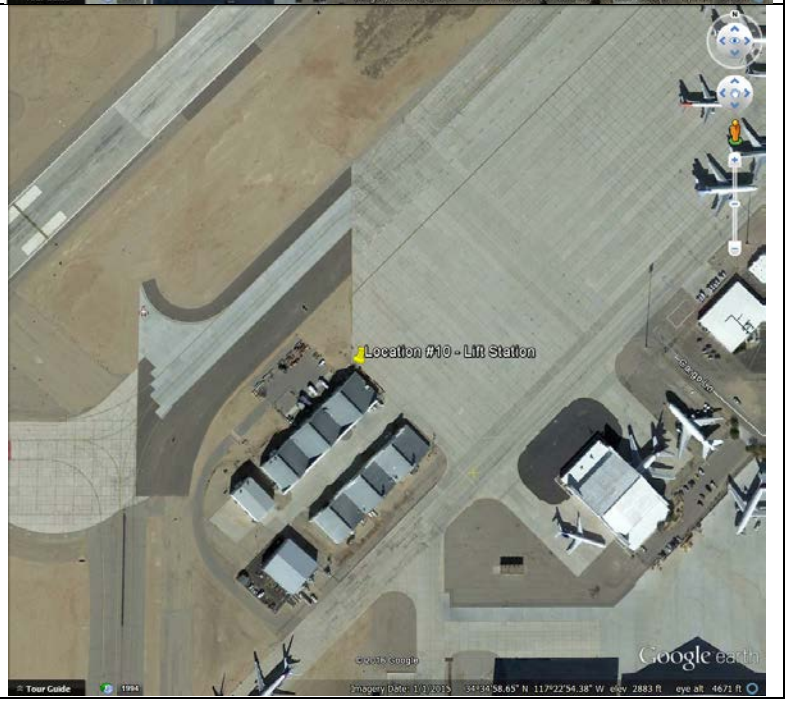
Location 5 – Stoddard Wells Road Lift Station



Location 6 – Mojave River Crossing Force Main



Location 7 – September 2015 Sanitary Sewer Overflow Location	
Location 8 – Manhole ID #111 SmartCover	

Location 9 – SCLA Sewer Lift Station #1	
Location 10 – SCLA Sewer Lift Station #2	

Attachment 9

Email Correspondence Regarding SSO #814130

Elder, Bryan@Waterboards

From: Brian Gengler <BGengler@CI.VICTORVILLE.CA.US>
Sent: Thursday, December 10, 2015 8:15 AM
To: Vazquez, Gil@Waterboards; Norman, Russell@Waterboards
Subject: Victorville WDID 6SSO11425, Amend SSO #814130

I am requesting to amend this SSO report to a category 1 from a category 2 because we were advised to do so yesterday by Bryan Elder who was auditing us. The SSO occurred in a wash.

Thanks,

Brian Gengler, LRO
City Engineer