CMOM ANNUAL REPORT CY2018









Albuquerque Bernalillo County Water Utility Authority

Contents

Capacity, Management, Operations and Maintenance (CMOM) Plan Overview	3
Report Purpose	
Permit Requirements	
CMOM Program Self-Assessment	4
FOG Policy	4
FOG Enforcement	5
SSO Analyses	6
Permit Requirements	6
SSO Study Team	6
Causes & Mitigations	
SSO Tabulation & Analysis	9
Volume Spilled and Recovered	11
Actions Implemented and On-Going Programs	
General	12
FOG Policy Implementation:	13
Overflow Emergency Response Plan (OERP)	13
Force Main Inspection Program	14
Closed Circuit Television (CCTV)	14
Cleaning Program Goal	16
Root Foaming	17
Generator Plan	17
Formalize SSO Follow-Up Involving Administrative Assessments or Equivalent	17
E. coli Testing Processes	
Odor Complaints	
Identified Gaps in the Water Authority Processes with Recommendation to Close	
Prohibited Discharges, i.e., SSOs	19

Appendices		20
Appendix 1	Sanitary Sewer Overflow Analysis Table	21
Appendix 2	Sanitary Sewer Overflow Volume Captured Analysis Table	22
Appendix 3	Overflow Emergency Response Plan (OERP)	23
Appendix 4	CY2018 Goal Summary Table	24
Appendix 5	Text for Recognition Awards – Portable Generators	25
Appendix 6	Five-Day Letter for 2018-06-04 Overflow	

Capacity, Management, Operations and Maintenance (CMOM) Plan Overview

In accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. NM0022250 (Permit), the Albuquerque Bernalillo County Water Utility Authority (Water Authority) prepared a Capacity, Management, Operations and Maintenance (CMOM) Plan with Emphasis on the Fats, Oils and Grease (FOG) Policy. The effective date of the Water Authority's permit is October 1, 2012.

Only the first, FY2013 Report was required by the Permit. All subsequent reports have been voluntary.

The CMOM Plan consists of the following documents:

- 1. FOG Policy
- 2. CMOM Annual Report
- 3. CMOM Program Self-Assessment

The CY2018 CMOM Annual Report follows previous FY2013-17 and CY2017 reports. The five previous reports, as well as the most recent, can be accessed at <u>http://www.abcwua.org/Sewer_System.aspx</u>.

Appendix 4 provides a summary of goals established in this CY2018 CMOM Report.

Report Purpose

As indicated by its name, the CMOM Annual Report will be reissued to describe CMOM activities in the previous calendar year (January 1 to December 31). The CMOM Annual Report provides summary descriptions of CMOM activities (past and planned) and is intended to be a communication tool. The report is intended for Water Authority staff, regulatory authorities, customers, and the general public.

Permit Requirements

The Water Authority discharges to the Rio Grande under authority of NPDES Permit No. NM0022250 (Permit). Under this Permit, the Water Authority operates the Southside Water Reclamation Plant (SWRP) and the Collection System. The following are the Permit requirements that impact the collection system.

- 1. The Water Authority must submit a (monthly) Discharge Monitoring Report (DMR) in tabular form for all overflows. (Part I, Paragraph C.6).
- 2. The Water Authority must develop a Capacity, Management, Operation and Maintenance (CMOM) Plan with emphasis on the Fats, Oils and Grease (FOG) Policy. The FOG Policy will be a re-evaluation of the existing Sewer Use and Wastewater Control (SCO) Ordinance. The goal of the FOG Policy will be to reduce Sanitary Sewer Overflows (SSOs). The FOG Policy may address such items as an inventory of repeat Food Service Establishments (FSE) that cause SSOs and routine grease trap inspection programs at FSE with increased frequencies for repeat FOG SSO FSEs. Additional elements of the FOG Policy may be sewer line inspections, such as video recording and required sewer line cleaning activities if warranted at repeat sites.

CMOM Program Self-Assessment

EPA states (see <u>http://www.epa.gov/npdes/pubs/cmomselfreview.pdf</u>): "An important component of a successful CMOM program is to periodically collect information on current systems and activities and develop a "snapshot-in-time" analysis. From this analysis, the utility establishes its performance goals and plans its CMOM program activities." The Water Authority developed Self-Assessments as a part of the FY2013 and FY2014 reports. Because the data provided in the Self-Assessment does not significantly change year-to-year, the Water Authority has set a goal of updating the Self-Assessment every five years.

Therefore, the CMOM Program Self-Assessment CY2018 has been prepared and posted to <u>http://www.abcwua.org/Sewer_System.aspx</u> along with the CMOM Reports. Rather than being an appendix to the CMOM Report, it is now a stand-alone document.

The next update will coincide with the CY2023 CMOM Report.

FOG Policy

The Water Authority's FOG Policy is a separate document. The FOG Policy was developed as a requirement of the NPDES Permit effective on October 1, 2012 and subsequently approved by the United States Environmental Protection Agency (EPA). The policy was developed to work in conjunction with the Water Authority Sewer Use and Wastewater Control Ordinance (SUO) and Enforcement Response Plan (ERP) to reduce the rate of SSOs in the collection system and decrease FOG loading at the SWRP. The policy describes expectations for FOG dischargers such as Food Service Establishments (FSEs) and waste haulers, and the steps the Water Authority is taking to mitigate FOG.

The FOG Policy sets a Water Authority goal of inspecting every FSE at least once every three years. Details of what is expected of the FSE in terms of Grease Removal System (GRS) functionality, pumping schedule, maintenance, and recordkeeping are identified. The FOG policy

explains the Water Authority use of the 25% solids and grease rule (25 Percent Rule) to determine if a GRS is filled to capacity. The policy also contains Best Management Practices (BMPs) such as scraping plates, using screens, and not using emulsifiers, etc.

Pumper requirements are also covered in the FOG Policy. Full evacuation of a GRS is required each time pumping occurs. The pumper must leave the FSE documentation in the form of manifests that contain pertinent information such as date, time, volume pumped, and the condition of the GRS. The FOG Policy lists the minimum service to be provided by the pumper.

Enforcement of FOG violations and hauled wastewater violations is described in the FOG Policy. The FOG Policy works in conjunction with the ERP to set administrative assessments for violations.

The FOG Policy also sets forth the process for identifying new sources of FOG. The Water Authority Pretreatment Program will update the FOG database on an annual basis. The FOG Policy sets a goal that the Water Authority will meet with the City of Albuquerque, Bernalillo County, the Village of Los Ranchos, the Village of Corrales, plumbers, and the New Mexico Restaurant Association on a periodic basis to discuss FOG issues.

In developing the FOG Policy, the Water Authority held a meeting with the hauled wastewater permit holders on July 22, 2013 and a public meeting on July 25, 2013 to discuss the proposed Policy. The final FOG Policy was submitted to the EPA on September 27, 2013 and updated in the Pretreatment Program modification documents sent to EPA on June 2, 2014. No comments from EPA were received regarding either submission, thus indicating approval.

FOG Enforcement

In CY2018, the Water Authority Pretreatment Program had 1,724 compliant FSEs out of 2,157 FSE sites for a compliance rate of 80%. 1,241 FSE inspections were conducted with 814 passing and 425 failing. Of the 425 failed inspections, 234 Notices of Violation were issued. 147 FSEs corrected the deficiencies and called for a re-inspection within fifteen (15) days. The remaining 96 FSEs did not take corrective action and thus were issued a second Notice of Violation (NOVs) of which one was for no GRS. 114 were for non-functioning GRS, 70 were for GRS needs pumping, or missing manifests.

In response to SSOs, 20 FSE inspections were conducted with 10 failing. Within fifteen-days, nine (9) FSEs corrected the deficiency. One (1) FSE took up to 80 days after the issuance of NOV to resolve the issue. In addition, Water Authority Pretreatment personnel distributed FOG brochures to FSEs, single-family residences and apartment complexes upstream of the SSOs.

Additionally, the Water Authority's Public Information Office advanced radio, print and television public outreach for the purpose of improving the Water Authority's FOG Policy.

SSO Analyses

Permit Requirements

The Permit requires a CMOM Plan with an emphasis on FOG Policy. The Plan goal is to reduce impacts on the sewer system caused by FOG and the Policy goal is to reduce SSOs. The FOG Policy states that the Pretreatment Program will investigate all SSOs related to large amounts of grease. The policy is to take enforcement actions for violations of FOG requirements with priority on FSEs causing repeat SSOs.

SSO Study Team

To meet these requirements, the Water Authority created an SSO Study Team. The Team is comprised of:

- 1. Collection Section Research Analyst (team lead), Gravity Superintendent, Assistant Superintendent and Closed Circuit Television (CCTV) Supervisor;
- 2. NPDES Pretreatment –Industrial Pretreatment Engineer and Pollution Prevention Specialist.

The Mission Statement for the Study Team is: *The SSO Study Team will work inter-divisionally to study, analyze and determine causes of previous SSOs to mitigate future SSOs in the Collection System.*

The Study Team procedure is:

- 1. Tabulate all 10-40s, 10-42s and 10-48s (see Table 1 for definitions).
- 2. Ensure all segments responsible for causing 10-42s and 10-48s are televised.
- 3. The Research Analyst will review and analyze all CCTV inspections to determine causes (if possible) and document findings.
- 4. To conduct meetings with the SSO Study Team to review and analyze CCTV that needs further investigation for resolution.
- 5. Recommend/implement and document mitigations (if possible) based on analysis.
- 6. Coordinate with NPDES Pretreatment concerning grease issues discovered during analysis.

	Sewer Trouble Definitions						
10-40Sewer BackupA gravity line blockage that does not result in a spil or in the vacuum system, a low vacuum (low vac) that causes a customer service disruption. Does not result in an SSO Reportable (10-42) or a Property Damage (10-48).							
10-42	SSO Reportable	An overflow of sewage from the system that may impact surface waters. These are reported to the EPA and other locally impacted stakeholders.					
10-48	Property Damage	An overflow of sewage from the system that results in damage to private property. These are not reportable under current definitions.					

Table 1 Sewer Trouble Definitions

Appendix 1 identifies all 10-42s and 10-48s, and the overflows that resulted in both a 10-42 and a 10-48. When documenting the number of Sewer Troubles of different types, for example in Figure 1 and Figure 2, the 10-42 item includes all overflows that may impact surface waters, including those that also had property damage; the 10-48 item includes overflows that only resulted in property damage. This prevents double-counting the number of overflow occurrences.

All 10-40s, 42s and -48s were CCTV inspected, although only 10-42s are "reportable", i.e., required to be reported to the EPA, et al. All 10-42s and -48s were then examined by the Study Team and a Cause and Mitigation were determined.

Cause(s) of SSO from D	MR	Causes determined from CCTV
CO - Construction DB - Debr		SC - Surcharged
CU-Cause Unknown	RK -Rocks	SL - Sag in Line
EQ - Equipment	GR -	
Failure	Grease	IT - Intruding Tap
SGG-Sand, grit or		
gravel	RT - Roots	MH - Manhole
	RN -	
LF - Line Failure	Rainfall	OJ - Offset Joint
V - Vandalism	RGS -Rags	
RGR - Roots / Grease	BP -Burped	

Table 2 Types of Causes for SSOs

Causes & Mitigations

The Cause(s) were selected from Table 2 that identifies SSO causes from the DMR and CCTV. The monthly SSO DMR has a specific list of Causes that are based on system observations made by an Operator or Supervisor at the site of an SSO. The CCTV data provided to the Study Team often results in a different, more refined Cause or Causes. Table 3 provides the causes determined by the Study team for CY2018. (Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.)

10-42, 10-48 Causes	Total	% of Total
Burped	1	3%
Construction	7	18%
Construction/Debris	1	3%
Cause Unknown	5	13%
Debris	1	3%
Equipment Failure	2	5%
Grease	4	11%
Line Failure	5	13%
Roots	8	21%
Roots/Grease	1	3%
Sand, Grit or Gravel	1	3%
Sag in Line	2	5%
Grand Total	38	100%

Table 3 Summary of Causes from SSO Study

Mitigations are the steps that the Team identified to prevent a recurrence of an SSO, at least for the identified Cause. Specific Mitigations are very dependent on the conditions observed from the CCTV video and report. Table 4 provides a summary of the various Mitigations. The Mitigations are tracked through completion or implementation. (Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.)

Table 4 Summary Mitigations from SSO Study

			% of
10-42, 10-48 Mitigations	Total		Total
Construction		2	5%
No Follow Up Needed		9	24%
Other		3	8%
Pretreatment Notified		2	5%
Pretreatment Notified/Special			
Cleaning		1	3%
Pretreatment Notified/Short			
Interval		1	3%
Rehab/Replace		10	26%
Short Interval		7	18%
Special Instructions		3	8%
Grand Total		38	100%

SSO Tabulation & Analysis

Figure 1 shows the cumulative 10-42s by month for CY2012-18.

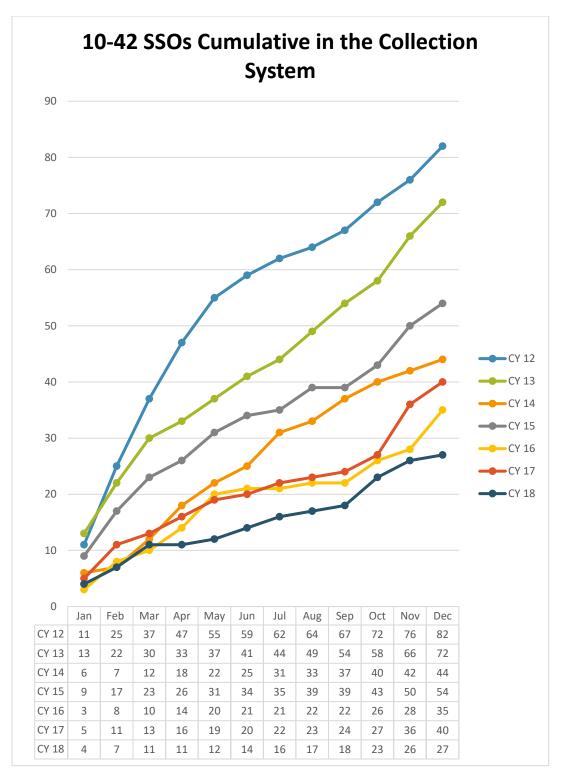


Figure 1 Reportable SSOs

Appendix 1 contains a list of every 10-42 and 10-48 event in CY2018. The table columns are grouped as follows:

- 1. The type, i.e., 10-42 or -48, is identified on the left. In one case a single event was both a 10-42 and a 10-48, as indicated.
- 2. Next to the right are the data included in the monthly SSO DMRs. It is noted that a "Reported Cause" is listed. This is typically based on the observations of the Operator that reported the SSO.
- 3. Next to the right is data determined by the Study Team:
 - a. Cause
 - b. Mitigation
 - c. If Pretreatment follow-up is necessary
- 4. To the far right are follow-ups by NPDES Pretreatment
 - a. FSEs visited
 - b. Notice of Violation issued

The SSO Rate is defined as 100 times the number of SSOs in a year divided by the miles of sewer in the system. The Water Authority system has a total of approximately 2,414 miles of line (p. 8 of the Self-Assessment). The SSO rate is therefore 3.4, 3.0, 1.8, 2.2, 1.4, 1.7 and 1.1 for CY2012-18 respectively.

Figure 2 shows the total sewer troubles, i.e. 10-40s, -42s, and -48s by year for CY2012-18. This graph does not include 10-48s due to "burps" which are not due to a blockage or other failure resulting in the overflow of sewage. Instead, air displaced during the Vactor jetting cleaning can under certain circumstances force out the water in the home fixture P-traps, e.g. toilets and sinks. These sometimes result in claims and are therefore included in the Property Damage totals for completeness and consistency. There was one burp during CY 2018. This burp is identified in Appendix 1.

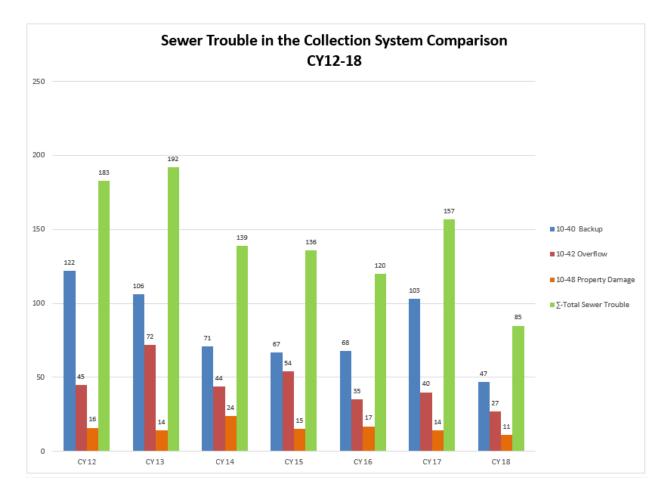


Figure 2 Sewer Trouble Comparison

Volume Spilled and Recovered

Via the OERP, the Water Authority has implemented a policy of capturing spills and documenting actions. Appendix 2 provides estimated spill volumes and volumes recovered for the 27 reported SSOs for CY2018. Of the spill volume estimated not to be recovered, none was identified as directly reaching the Rio Grande. No spills reached a facility operated by the MRGCD.

Actions Implemented and On-Going Programs

General

Below are gaps that were identified in the CY2017 CMOM Report and were closed in CY2018, or are on-going programs, or both. In addition to the commitments made in the CY2017 CMOM Report, CY2018, the following additional actions were taken to expand the Water Authority's ability to operate and maintain the system.

- 1. Purchase orders were issued for two new Vactors to be obtained and put into service in CY2019.
- 2. As in years past, Public Affairs involvement in SSO prevention took the form of a fall/winter advertising campaign emphasizing proper care of the sanitary sewer system. Messages appeared on TV, radio and outdoor billboards as well as in Water Authority bill inserts and on social media platforms such as Facebook. The utility's "spokes-elephant," Chuckie, delivered reminders of the importance of keeping grease and trash out of household plumbing. Refrigerator magnets (see Figure 3) with a reminder to "Keep Trash out of the Toilet" were also distributed at events and public meetings. These efforts will continue.



Figure 3 Refrigerator Magnet

FOG Policy Implementation:

The FOG Policy is an on-going program and FOG Enforcement efforts are a part of this program. Both the FOG Policy and the FOG Enforcement efforts are described above. On-going efforts are described in the FOG Enforcement section and not reiterated here.

In the CY2017 CMOM Report, the following goal was identified:

Develop a link between the Linko FOG database utilized by NPDES Pretreatment and the Maximo work order system used by the Collection Section.

This was investigated and was found to not be possible. This completes this effort.

In the CY2017 CMOM Report, the following goal was identified:

Continue working on creating an FSE flier in Spanish. The Pretreatment Section, in conjunction with the Public Information Office, will continue to develop FSE fliers in languages other than English.

An FSE flier has been developed in Spanish. This completes this goal. In FY2020, an FSE flier will be developed in Chinese.

Overflow Emergency Response Plan (OERP)

This is an on-going program to update the OERP as required. In CY2018, the following modifications were made to the OERP:

- 1. Page 4:
 - a. For Bernalillo County, changed the contact as Hugh O'Neall has retired, and added Kali Bronson as the backup.
 - b. For COA, updated the Engineering Division Manager since Bryan Wolfe retired.
- 2. Page 11:
 - a. Updated the MRGCD contacts per input from Jason Casuga.
 - b. Updated the POI contacts. Ruben Lucero replaced Ramona Montoya. Ruben Lucero was replaced by Michael Jojola.
 - c. Added a reference to Page 12.
- 3. Page 12:
 - a. This is a new page to clarify the process for sampling an MRGCD facility for E. coli upstream and downstream of an SSO.

The Collection Section is the "owner" of the OERP. The Collection Section creates the components of the OERP, routes for internal review (specifically including the Compliance Division), and the completed portions are approved for posting to SharePoint by the Collection Section Manager. Appendix 3 provides the OERP which was in effect at the end of CY2017. The most current version of the OERP is posted to <u>http://www.abcwua.org/Sewer_System.aspx</u>

On February 14, 2018, a field meeting was held to simulate an SSO impacting the Los Padillas Drain. The meeting was just south of Metzgar Road on the west side of the drain. The location was chosen to simulate an MRGCD response that would then include an AMAFCA facility. A primary purpose was to evaluate a draft OERP to include E. coli testing. Present at this field meeting were representatives of: MRGCD; AMAFCA; the Pueblo of Isleta; the Water Authority. The simulation consisted of each entity discussing how they would respond to an SSO. Throughout and after the simulation, questions were raised and discussed. The 10-10-2018 update to the OERP was based on this field meeting and the prior preparation.

An SSO totaling 1,535,550 gallons started on June 4, 2018. Most of the overflow drained to the San Jose Drain. This facility is operated by the City of Albuquerque under a license agreement dated March 7, 1977 with the MRGCD. The five-day letter, attached as Appendix 6, describes the spill and the steps the Water Authority took in accordance with the OERP.

Force Main Inspection Program

This is an on-going program in which the alignment is annually inspected for all force mains and valves found in field are compared to those in the GIS mapping and this information is stored in Maximo.

The parallel 18" and 24" force mains serving LS24 were tested to determine how much flow each force main can handle if half of the 18" or half the 24" force main is shut down. Based on this test, it was not definitively resolved if half on the 24" force main and all the 18" can handle the existing flows. It is recommended a field test be performed in FY20 to provide additional insights.

Closed Circuit Television (CCTV)

This is an on-going program. The following recommendation is made in the FY2013 CMOM Report: "CCTV inspections of the collection system as follows: 1) Small diameter main lines less than 15": In four of five years, televise approximately 5% per year of the small diameter system. Televise high risk lines based on current Asset Management Plan and subsequent inhouse analysis. 2) Large diameter lines 15" and larger: Every fifth year, televise as much as possible acknowledging access limitations of the unlined concrete lines 15" and larger. Anticipated schedule: 3) FY2014-17: 5% of the small diameter each year. 2) FY18: Large diameter unlined concrete pipe."

CMOM Report figures for cleaning and CCTV will continue showing fiscal year (FY) goals in accordance with funding and contracting cycles and actual metrics will reflect work through the end of the calendar year (CY). Figure 4 provides the CCTV goal for a ten-year basis and the actual CCTV inspection through CY2018. The CY2018 portion of this recommendation is complete.

The CCTV program will continue. Anticipated schedule:

- 1. FY19: 5% of the small diameter.
- 2. FY20: 5% of the small diameter.
- 3. FY21: 5% of the small diameter.
- 4. FY22: 5% of the small diameter.
- 5. FY23: Large diameter unlined concrete pipe.
- 6. FY24: 5% of the small diameter.

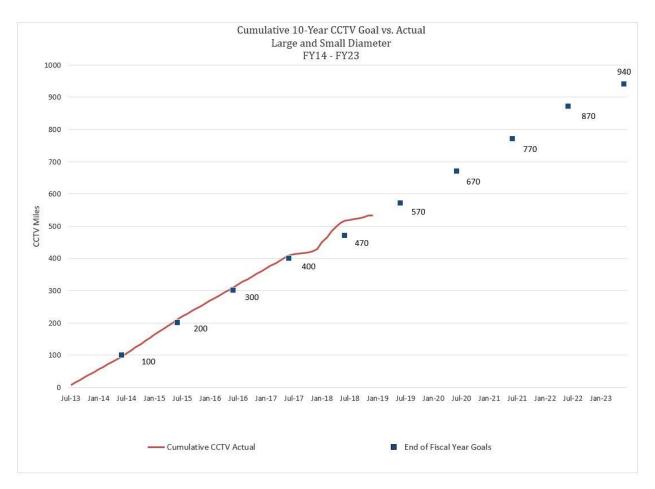


Figure 4 Small Diameter Sewer CCTVed vs. Ten-Year Goal

Cleaning Program Goal

This is an on-going program. The following recommendation is made in the FY2013 CMOM Report: "The Water Authority will establish and monitor a goal of cleaning all gravity small diameter lines every ten years. (This will be accomplished through the existing Sub-Basin program.) The Water Authority will continue the program of high-frequency maintenance of known problem locations within the system. (This will be accomplished through the existing Short Interval program.) The frequency of Short Interval cleaning will vary in accordance with system performance and risk factors, maintenance history, and the latest maintenance findings."

CMOM Report figures for cleaning and CCTV will continue showing fiscal year (FY) goals in accordance with funding and contracting cycles and actual metrics will reflect work through the end of the calendar year (CY). As shown Figure 5, the Water Authority is ahead of its goal to clean then entire system once in ten years through the Sub-Basin program.

The Sub-Basin program and associated ten-year cleaning goal remain in place. While meeting this CMOM commitment for Sub-Basin cleaning, the Collection Section has increased Short Interval cleaning.



Figure 5 Small Diameter Sewer Cleaned vs. Ten-Year Goal

Root Foaming

The following recommendation is made in the FY2013 CMOM Report: "Starting in FY15, implement a 3-year pilot program. Root foam selected lines that meet the root infested and / or inaccessibility criteria. Compare effectiveness to mechanical cleaning currently practiced and provide recommendation."

The Root Foaming Pilot Project is a three-year treatment program with follow-up study. The FY15 and FY16 groups were foamed in June 2015 and March 2016 respectively. Per vendor recommendations, the FY15 group was retreated in June 2017. This completed the foaming application portion of the Pilot Project. An interim inspection of the FY15 treated and control group was performed in FY2016 and was inconclusive. During FY2017, the FY15 and FY16 lines, both treated and control, were scheduled for CCTV inspection. In CY2018, this CCTV data was examined to compare treated and control pipes but was inconclusive. In CY2019, this effort will continue.

Generator Plan

The CY2017 Report stated: "On 4/12/2017, the power was shut down at Vacuum Stations 57 and 68 and portable generators were utilized simultaneously run both stations. In FY2018, it is recommended that a simultaneous power failure be tested at three vacuum stations. Again, power will be shut down and portable generators will be hooked up and attempt to run the three stations simultaneously. In CY2018, the recommended testing will be completed."

In CY2018, the test was performed to run three station simultaneously. On October 4, 2018, a significant PNM outage impacted vacuum stations 61-64, 63, and 66. All power was lost at the four stations. Largely due to the continuing Water Authority efforts starting in FY2015, power to the stations was quickly restored and customer service was not interrupted at all. Appendix 5 is the text for Employee Recognition awards made to employees in the Field and Plant divisions.

This gap has been resolved and will be removed from future CMOM reports.

Formalize SSO Follow-Up Involving Administrative Assessments or Equivalent The CY2017 CMOM Report states:

In the FY2017 Report, the following recommendation was made: "In FY2018, it is recommended that the Compliance Division develop a Sewer Trouble Invoice Statement to be utilized, where appropriate, to assess costs for sewer blockages, including those for which an SSO did not occur."

As stated in the FY2017 Report, the purpose of this Sewer Trouble Invoice Statement is to address SSOs directly caused by construction contractors or commercial/industrial users. In many such cases, the Water Authority has taken steps to hold the offending party responsible and required financial compensation. Cost assessments have been based on direct costs of a particular blockage, both to immediately respond and for follow-up cleaning and inspection. Costs have been developed by the Collection Section, or in the case of contractor repairs, by Centralized Engineering. Dependent of the particulars of the blockage and the offending party, costs may be assessed and collected by different groups, e.g. Compliance Division or Risk Management.

During CY2017, the Sewer Trouble Invoice Statement was discussed conceptually with the intent to complete development and have it available when needed.

It is recommended that, in CY2018, the Sewer Trouble Invoice be developed and be available for use. It is recommended that it be considered for SSOs subsequently and directly caused by construction contractors or commercial/industrial users.

In CY2018, the Sewer Trouble Invoice was developed by the Compliance Division. There were no opportunities to utilize it.

This gap has been resolved and will be removed from future CMOM reports.

E. coli Testing Processes

The CY2017 CMOM Report states:

Page 11 of the OERP requires "Sample MRGCD facility for E-coli upstream and downstream of SSO."

In CY2018, it is recommended that the OERP be updated to clarify the processes. It is recommended that a draft version of the updated OERP be tested along with the MRGCD, the POI, and AMAFCA.

As noted above, the OERP was updated in CY2018 to clarify the process and prior to being updated, a draft version was tested.

This gap has been resolved and will be removed from future CMOM reports.

Odor Complaints

Odor complaints are tabulated and reported monthly. The Water Authority odor control program is described in the CMOM Self-Assessment Report in the Hydrogen Sulfide Monitoring and Control (HSMC) section in the current CMOM Program Self-Assessment.

Identified Gaps in the Water Authority Processes with Recommendation to Close

In the process of continuous improvement, the Water Authority is committed to identifying and closing gaps. As discussed above, most of these recommendations are now considered On-Going programs.

Prohibited Discharges, i.e., SSOs

The Water Authority acknowledges that prohibited discharges have occurred and that all discharges from the sanitary sewer system are prohibited.

Recommendation: The Water Authority will annually examine sewer system performance, set specific steps for decreasing SSOs and mitigating their impacts, and has a program of continuous improvement.

Appendices

Appendix 1Sanitary Sewer Overflow Analysis Table

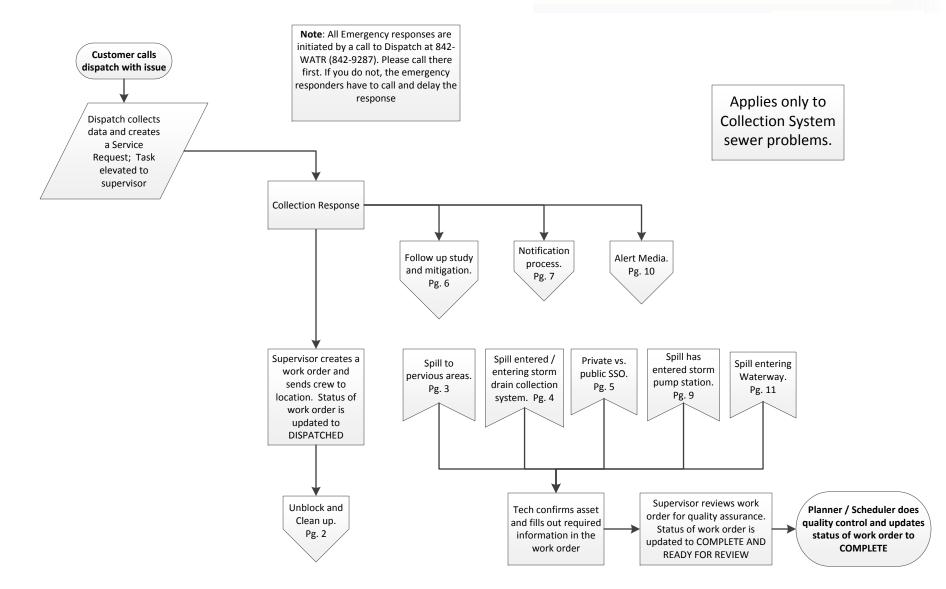
	Туре									DMR							SSO Tea	m Study	Enfo	rcemer	nt
10-42	10-48	10-42 &10- 48	Maximo WO #	Diameter	Repeat	Repeat within 1 year	Date of SSO	Time of SSO	Duratioin (HH:MM)	Location	Estimated Volume (gallons)	Reported Cauese of Overflow	Observed Enviromenta I Impacts	Action Taken	Ultimate Discharge Location	Volume Recovered (gallons)	Cause	Mitigation	Pretreatmen t Follow Up Requested	FSEs Visited	Notice of Violation
	Х		90673	8"	Y	Ν	1/6/2018	12:05 PM	NA	508 WELLESLEY DR SE	NA	GR	NA	СС	РР	NA	RT	SP			
	Х		92742	8"	Ν	Ν	1/10/2018	11:20 AM	NA	6217 CENTRAL AVE NW	NA	CO/DB	NA	CC/CWW/WD/HTH	РР	NA	CO	NF			
Х			92372	8"	Ν	Ν	1/10/2018	10:30 AM	:49	5809 CENTRAL AVE NW	1,225	CO/DB	NEAH	CC/CWW/WD/HTH	SD	1,000	CO/DB	NF			
	Х		92965	NA	Y	Y	1/10/2018	5:32 PM	NA	7100 ISLETA BLVD SW	NA	EQ	NA	NA	РР	NA	EQ	RH			
Х			95013	8"	Ν	Ν	1/14/2018	10:30 PM	3:30	13901 SKYLINE RD NE (SRVPREM533923)	100	RGS	NEAH	CC/WD/HTH	AC	-	RT	RH			
Х			100759	15"	Ν	Ν	1/20/2018	9:25 AM	2:20	2444 JUAN TABO BLVD NE	18,125	GR/RGS	NEAH	CC/CWW/BR/RP/RS/WD/MC/HTH	AC	14,000	GR	PT	Х	10	2
Х			104397	8"	Ν	Ν	1/26/2018	12:31 PM	:14	415 CEDAR ST SE	25	СО	NEAH	ENC	PST	-	CO	RH			
Х			109294	8"	Ν	Ν	2/3/2018	9:15 AM	2:30	3701 INCA ST NE	750	GR/RGS	NEAH	CC/RP/RS/WD/HTH	PST	100	GR	PT			
Х			112924	8	Ν	Ν	2/12/2018	9:10 AM	:25	5700 CENTRAL AVE SW	125	СО	NEAH	CC/BR/RP/RS/WD	PST	75	CO	SP			
	Х		116707	8	Ν	Ν	2/13/2018	2:18 PM	NA	528 BARLANE PL NW	NA	GR	NA	СС	NA	NA	GR	NF			
Х			123176	8	Ν	Ν	2/24/2018	8:30 AM	2:15	716 FENNEL CT SE	2,500	RGS/RT	NEAH	CC/RS/WD/HTH	AD	-	RT	CO			
	Х		136788	8	Y	Ν	3/1/2018	10:00 AM	NA	7412 FRANK PL NE	NA	BP	NA	СС	РР	NA	BP	NF			
Х			135378	8	Ν	Ν	3/3/2018	8:14 PM	1:01	5128 RIO LAS VACAS PL NW	25	DB/GR/RGS	NEAH	CC/WD	PST	-	CU	NF			
Х			139954	8	Ν	Ν	3/9/2018	7:50 PM	:40	1501 COORS BLVD NW	15	GR	NEAH	CC/RS/WD/HTH	PST	10	CO	RH	Х	3	
Х			143642	8	Ν	Ν	3/16/2018	8:26 PM	:50	5021 SAN MATEO LN NE	100	GR	NEAH	CC/RP/RS/WD/HTH	PST	80	RT	SI			
Х			147057	NA	Ν	Ν	3/22/2018	2:19 PM	:31	7009 COORS BLVD SW	350	DB/EQ	NEAH	WD/HTH	YD	-	EQ	RH			
	Х		189773	8	Ν	Ν	5/21/2018	3:36 PM	NA	1016 VISTA GRANDE DR NW	NA	DB	NA	СС	PP	NA	LF	RH			
	Х		189776	8	Ν	Ν	5/21/2018	4:15 PM	NA	1108 VISTA GRANDE DR NW	NA	DB	NA	СС	PP	NA	LF	RH			
Х			191907	8	Ν	Ν	5/24/2018	11:00 PM	:30	1800 EUBANK BLVD NE	50	GR	NEAH	CC/WD/HTH	PST	-	SL	SI			
	Х		194483	12	Ν	Ν	5/30/2018	1:00 PM	NA	12524 CENTRAL AVE SE	NA	RGS	NA	СС	PP	NA	CU	NF			
		Х	198701 / 199096	72	Ν	Ν	6/4/2018	4:24 PM	12:13	2842 ARNO ST SE	1,535,550	LF	NEAH	CWW/BR/RS/WD/HTH	AC	1,500,000	LF	RH			
	Х		200590	8	Ν	Ν	6/6/2018	3:30 PM	NA	505 WESMECO DR SE	NA	LF	NA	СС	PP	NA	LF	RH			
	Х		199750	8	Ν	Ν	6/6/2018	8:00 AM	NA	7012 CARRIAGE RD NE	NA	RGR	NA	СС	PP	NA	RT	SI			
Х			200722	8	Ν	Ν	6/7/2018	7:25 AM	:50	13238 SUNSET CANYON DR NE	100	RGS	NEAH	CC/CWW/WD/PO/HTH	PST	75	RT	SI			
Х			237082	8	Ν	Ν	7/27/2018	8:41 AM	:34	600 TANAGER DR SW	55	DB	NEAH	CC/HTH/RP/WD	PST	55	DB	CO			
Х			237088	12	Ν	Ν	7/27/2018	9:40 AM	1:05	729 FOUR HILLS RD SE	130	RT	NEAH	CC/HTH/CWW/RP/WD	PST	100	CU	NF			
Х			244349	8	Y	Ν	8/8/2018	8:23 AM	:47	2335 DON LUIS RD SW	470	GR	NEAH	CC/HTH/CWW/WD	PST	400	SG	SI			
Х			283931	8	Ν	Ν	9/25/2018	12:33 PM	:42	2501 BUENA VISTA DR SE	1,050	RGS/RT	NEAH	CC/CWW/WD/RS/HTH	AC	850	RT	SP			
Х			289124	42	Ν	Ν	10/1/2018	1:00 PM	:01	CHURCHILL & OLD COORS SW	100	СО	NEAH	CWW/BR/WD/HTH	PST	100	CO	0			
Х			293434	42	Ν	Ν	10/8/2018	8:00 AM	:01	CHURCHILL & OLD COORS SW	20	СО	NEAH	CWW/WD/HTH	PST	20	CO	0			
Х			304042	8	Ν	Ν	10/21/2018	1:01 PM	1:29	9300 CLAREMONT AVE NE	4,450	GR	NEAH	CC/CWW/RP/RS/WD/HTH	PST	1,600	CU	NF			
Х			304043	8	Ν	Ν	10/21/2018	2:49 PM	1:06	5904 CORONA AVE NE	1,650	GR/RGS	NEAH	CC/RS/WD/HTH	SD	-	LF	RH			
Х			312966	8	Y	Ν	10/27/2018	7:30 PM	1:45	CANDELARIA & TRAMWAY NE	525	GR	NEAH	CC/RP/RS/WD/HTH	PST	450	SL	SI			
Х			320550	8	Ν	Ν	11/6/2018	4:43 PM	1:02	349 LA CHAMISAL LN NW	2	GR	NEAH	CC/WD/HTH	PST	-	GR	PT/SI	Х	1	1
Х			327321	42	Ν	Ν	11/10/2018	7:45 AM	:01	CHURCHILL RD / OLD COORS DR SW	150	СО	NEAH	CWW/RP/WD/HTH	PST	150	СО	0			
Х			337742	8	Ν	Ν	11/26/2018	7:23 PM	:42	Eastern Ave SE & Wellesley Dr SE	50	GR	NEAH	CC/HTH/RS/WD	PST	40	CU	NF			
Х			349710	8	Ν	Ν	12/11/2018	12:25 PM	:10	2855 2ND ST SW	100	GR	NEAH	СС/НТН/РО	0	100	RT/GR	PT/SC	Х	1	
	Х		361565	8	Ν	Ν	12/22/2018	11:24 AM	NA	11020 KIELICH AVE NE	NA	GR/RGS	NA	CC/PO	NA	NA	RT	SI			

Appendix 2Sanitary Sewer Overflow Volume Captured Analysis Table

	CY2018 10-42 SPILL VOLUME AND VOLUME RECOVERED									
Maximo WO #	Date of SSO	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Volume Not Recovered	% Recovered				
92372	1/10/2018	5809 CENTRAL AVE NW	1,225	1,000	225	82%				
95013	1/14/2018	13901 SKYLINE RD NE (SRVPREM533923)	100	-	100	0%				
100759	1/20/2018	2444 JUAN TABO BLVD NE	18,125	14,000	4,125	77%				
104397	1/26/2018	415 CEDAR ST SE	25	-	25	0%				
109294	2/3/2018	3701 INCA ST NE	750	100	650	13%				
112924	2/12/2018	5700 CENTRAL AVE SW	125	75	50	60%				
123176	2/24/2018	716 FENNEL CT SE	2,500	-	2,500	0%				
135378	3/3/2018	5128 RIO LAS VACAS PL NW	25	-	25	0%				
139954	3/9/2018	1501 COORS BLVD NW	15	10	5	67%				
143642	3/16/2018	5021 SAN MATEO LN NE	100	80	20	80%				
147057	3/22/2018	7009 COORS BLVD SW	350	-	350	0%				
191907	5/24/2018	1800 EUBANK BLVD NE	50	-	50	0%				
198701	6/4/2018	2842 ARNO ST SE	1,535,550	1,500,000	35,550	98%				
200722	6/7/2018	13238 SUNSET CANYON DR NE	100	75	25	75%				
237082	7/27/2018	600 TANAGER DR SW	55	55	-	100%				
237088	7/27/2018	729 FOUR HILLS RD SE	130	100	30	77%				
244349	8/8/2018	2335 DON LUIS RD SW	470	400	70	85%				
283931	9/25/2018	2501 BUENA VISTA DR SE	1,050	850	200	81%				
289124	10/1/2018	CHURCHILL & OLD COORS SW	100	100	-	100%				
293434	10/8/2018	CHURCHILL & OLD COORS SW	20	20	-	100%				
304042	10/21/2018	9300 CLAREMONT AVE NE	4,450	1,600	2,850	36%				
304043	10/21/2018	5904 CORONA AVE NE	1,650	-	1,650	0%				
312966	10/27/2018	CANDELARIA & TRAMWAY NE	525	450	75	86%				
320550	11/6/2018	349 LA CHAMISAL LN NW	2	-	2	0%				
327321	11/10/2018	CHURCHILL RD / OLD COORS DR SW	150	150	-	100%				
337742	11/26/2018	Eastern Ave SE & Wellesley Dr SE	50	40	10	80%				
349710	12/11/2018	2855 2ND ST SW	100	100	-	100%				
Grand Total			1,567,792	1,519,205	48,587	97%				

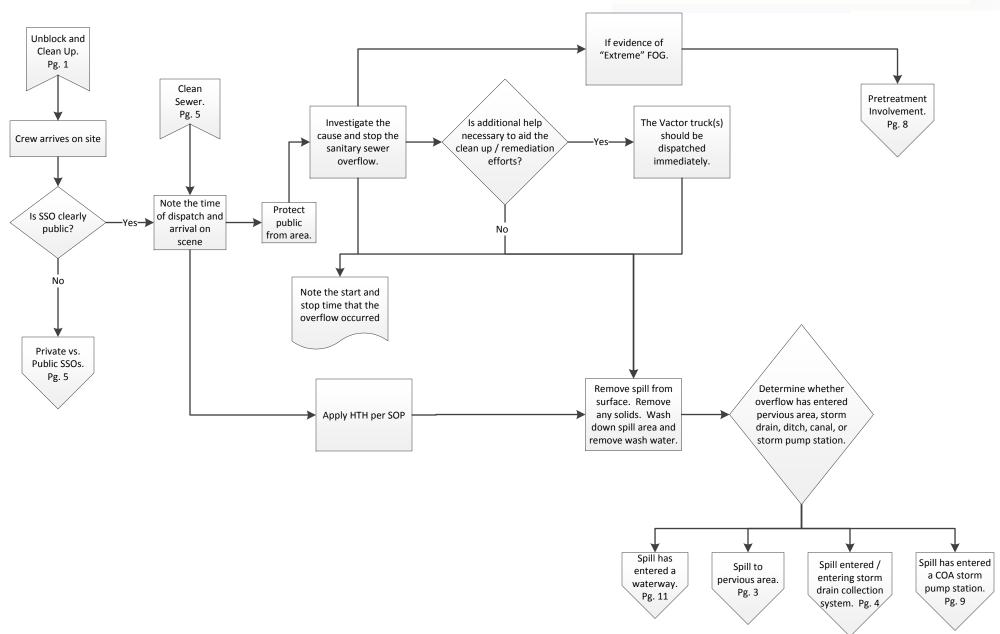
Appendix 3Overflow Emergency Response Plan (OERP)

Albuquerque Bernalillo County Water Utility Authority



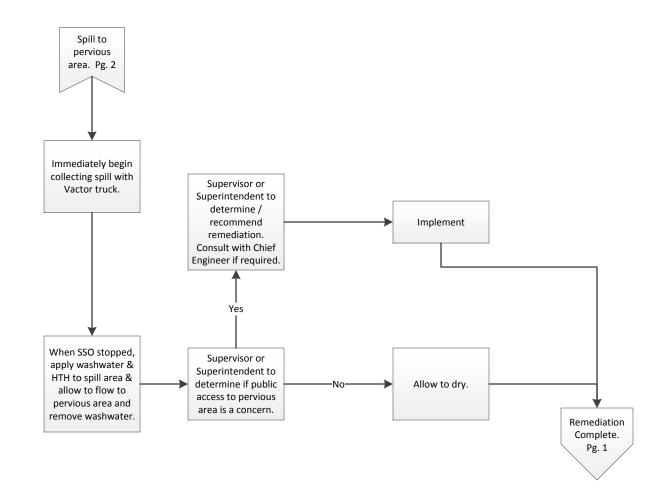
10-10-2018

Albuquerque Bernalillo County Water Utility Authority



Page 2

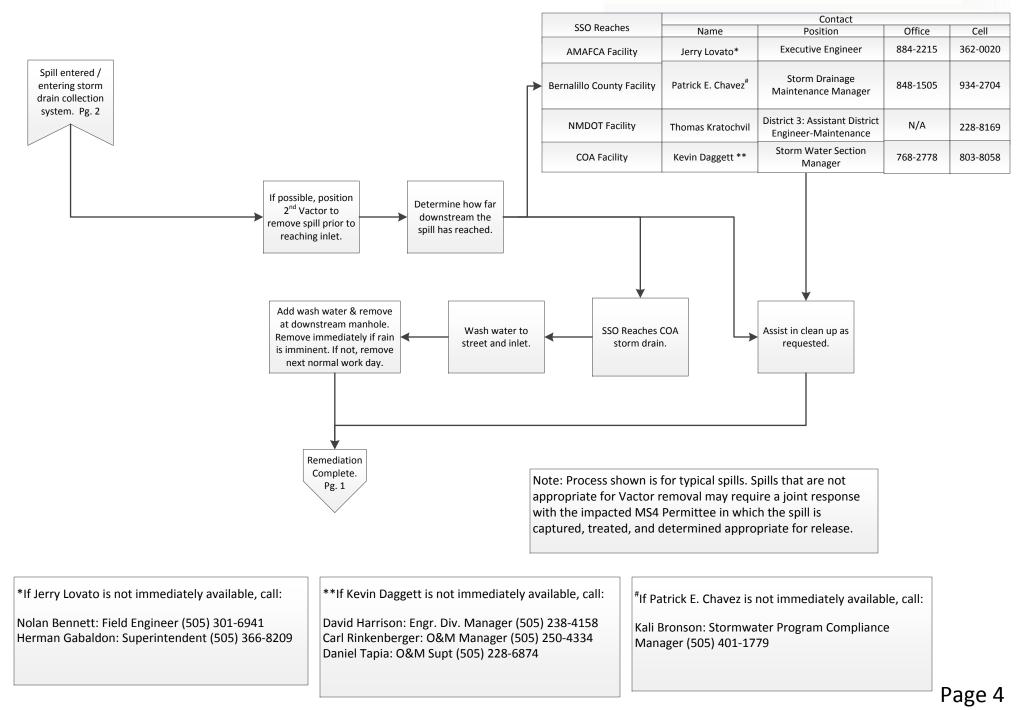
Albuquerque Bernalillo County Water Utility Authority



10-10-2018

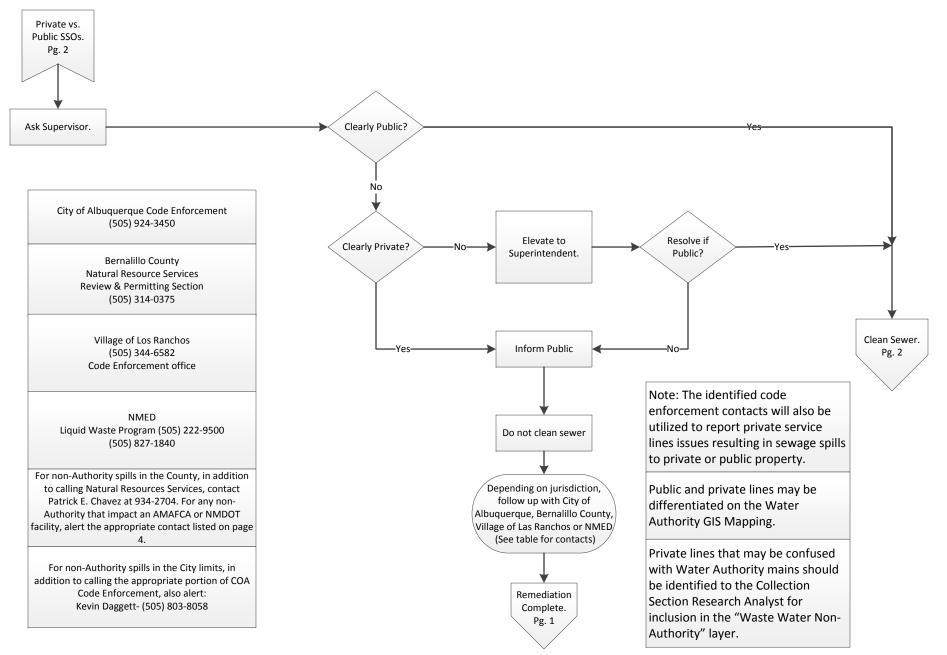
10-10-2018

Albuquerque Bernalillo County Water Utility Authority



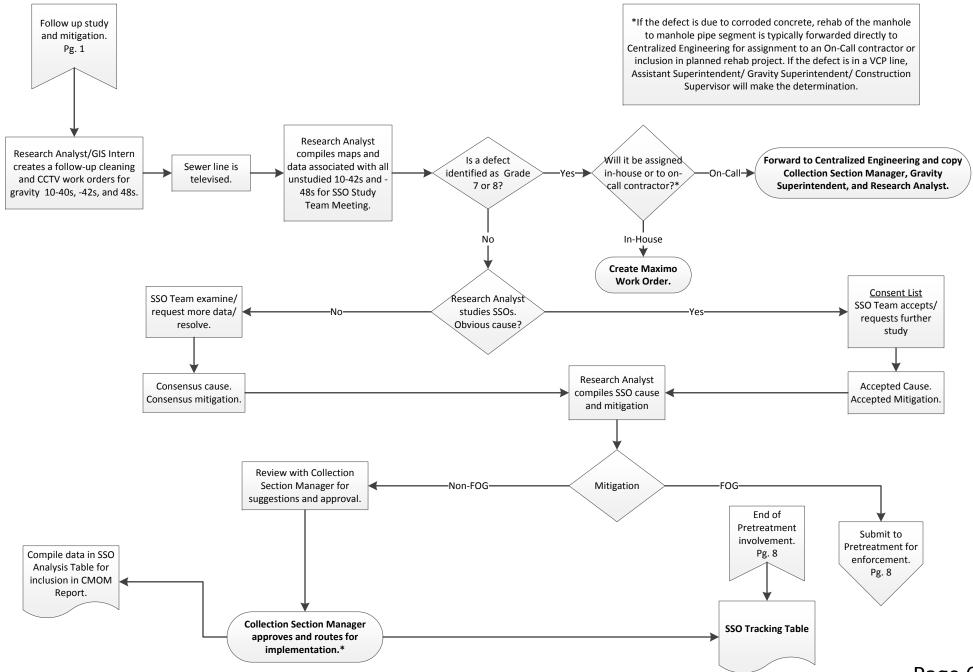
10-10-2018

Albuquerque Bernalillo County Water Utility Authority



10-10-2018

Albuquerque Bernalillo County Water Utility Authority

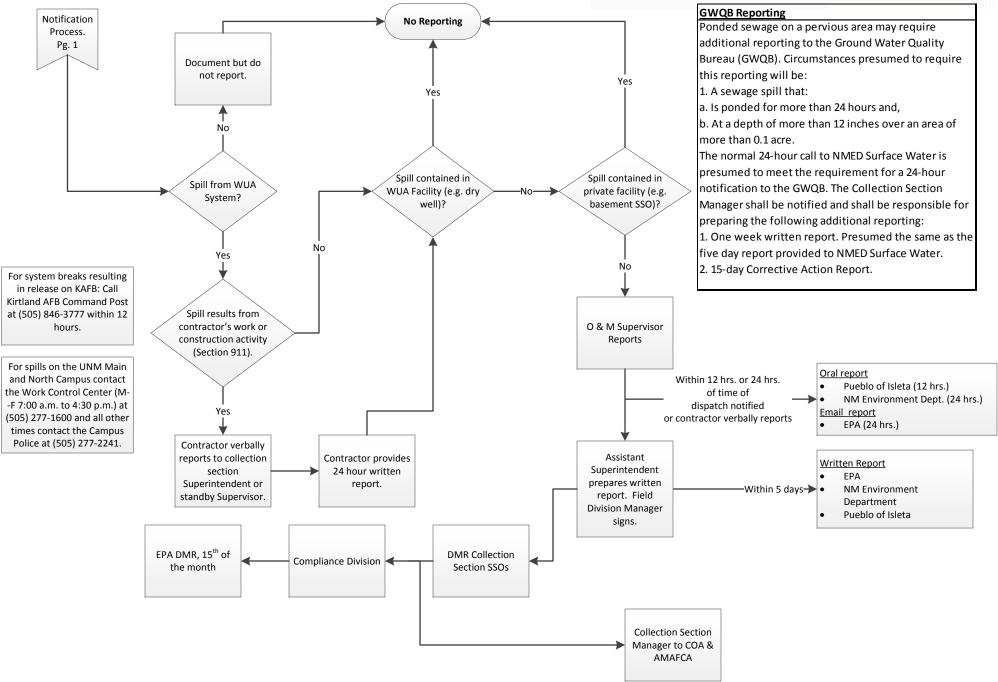


Page 6

10-10-2018

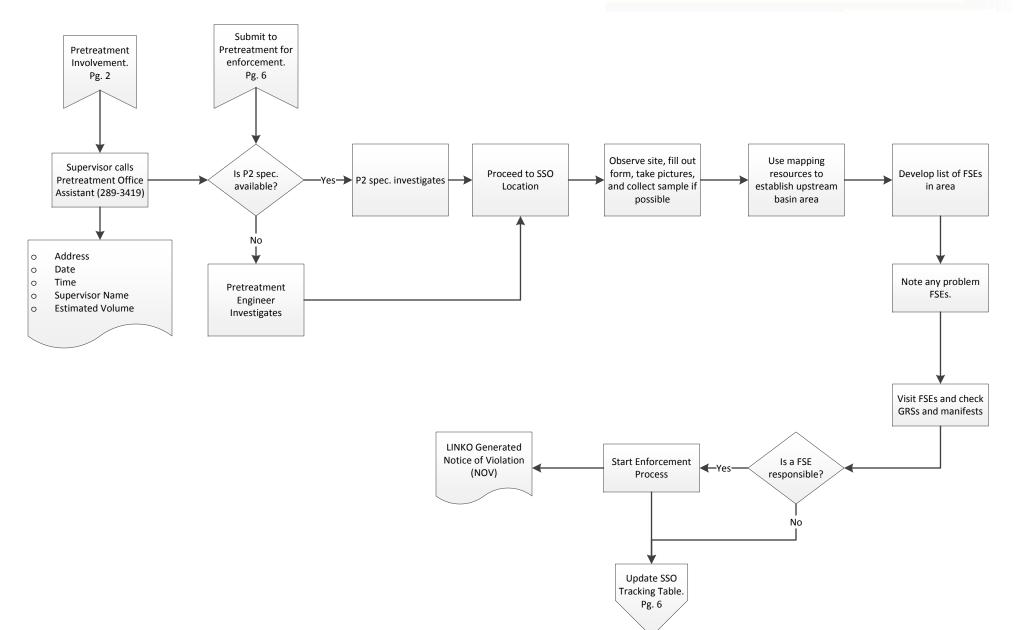
Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority



10-10-2018

Albuquerque Bernalillo County Water Utility Authority



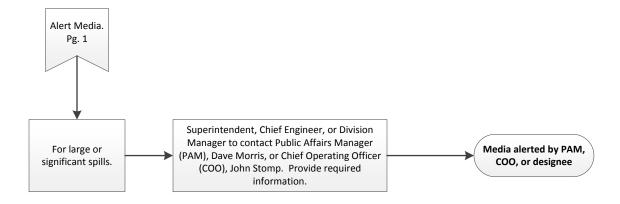
Albuquerque Bernalillo County Water Utility Authority

Spill has entered a COA storm pump station. Pg. 2 Shut down pumps Note: Process shown is for typical spills. Some spills may require a joint Remove sewage response with the City of Albuquerque in which the spill is captured, treated, with Vactor or pump and determined appropriate for release. to SAS Wash down wet well and remove wash water Remediation Complete. Pg. 1

10-10-2018

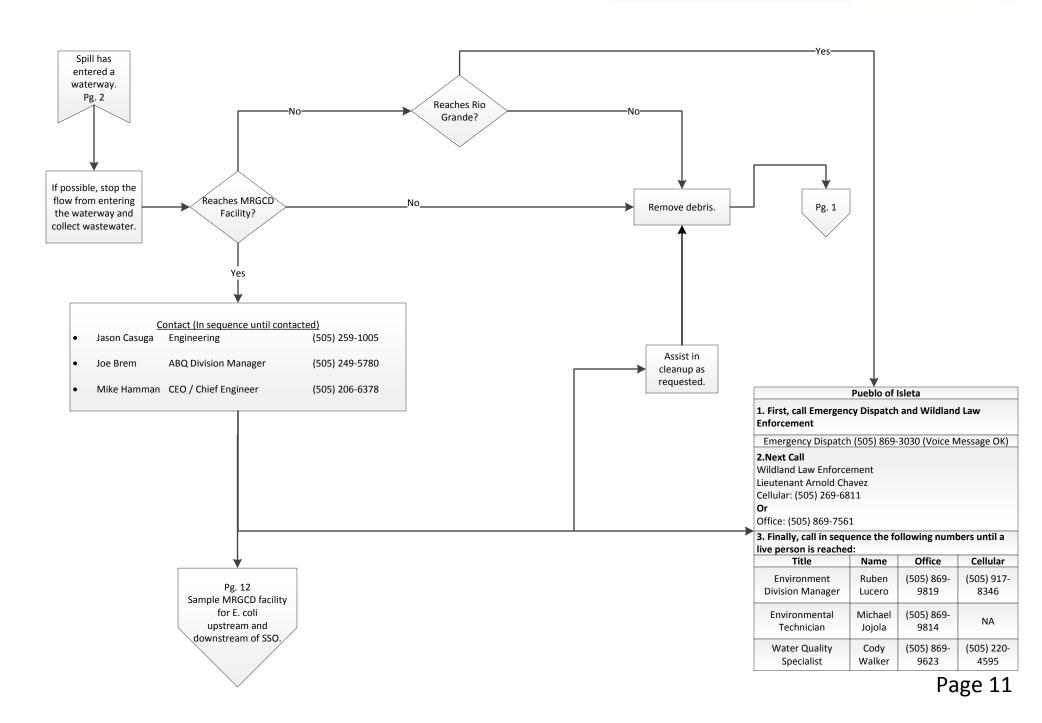
10-10-2018

Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

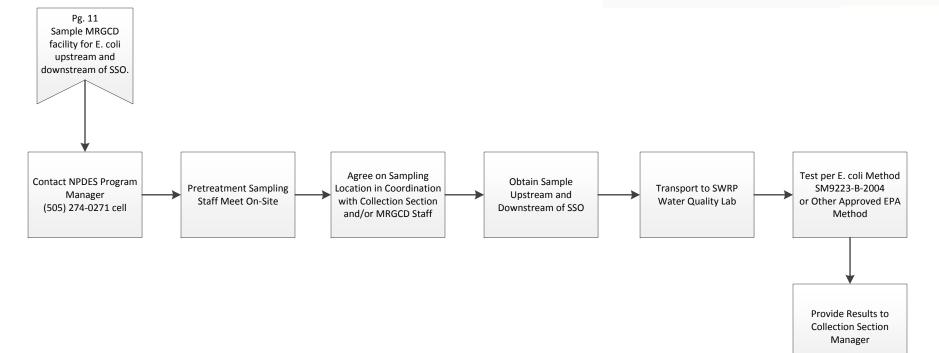
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

10-10-2018

Albuquerque Bernalillo County Water Utility Authority



Appendix 4 CY2018 Goal Summary Table

Goal Summary - CY2018 CMOM Report		
Goal	Timing	Page # for Discussion
CCTV all gravity pipes suffering a blockage. For all SSOs, determine a cause and mitigation and report in the next CMOM report	Annually	6
Public advertising	On-Going	12
FSE flier in Chinese	FY2020	13
Update OERP	As required	13-14
Force main inspection program	Annually	14
Test Lift Station 24 with a portion of one force main out of service.	FY2020	14
CCTV a portion of system	Ten Year goal. Report annually.	14-15
Ten Year goal.Clean a portion of the systemReportannually.		16
Compare root foaming effectiveness versus mechanical cleaning	CY2019	17
SSOs: Decrease number and mitigate impact.	On-Going	19

Appendix 5 Text for Recognition Awards – Portable Generators

On October 4, 2018, a significant PNM outage impacted vacuum stations 61-64, 63, and 66. All power was lost at the four stations. VS 63 is being upgraded and now has a permanent standby generator onsite. Restoring service at VS 63 only required the responding operator to reset the generator which then provided power until PNM power was restored. For the other three stations which do not have a permanent standby generator, such a power loss would have resulted a waterlogged piping system. The remedy is a time consuming and progressive process of bringing up one line at a time. Waterlogged piping at these three stations would have probably required three straight 16-hour days by all 12 workers in the Pump Station group (six WW Workers, five Station Operators and the Supervisor). Property damages in this situation are possible but are typically avoided. What would not be avoided is a worn out staff and significant overtime cost.

Instead, two portable generators were immediately brought out and put into service. (While VS 61 and 64 are two stations with a commensurately large piping system, they are co-located and share a single electrical service.) The vacuum pumps were put back into service so quickly that no lines were waterlogged.

Getting to this point was a true team effort, starting with the development of an SOP in FY2015. While preparation of the SOP was led by the Collection Section, SWRP Electricians were full partners. This SOP established processes for the use of portable generators, a maintenance schedule with responsibilities assigned, tabulated available generators and tabulated ampere loadings at each station. In FY2016, the failure of two vacuum stations was simulated. After a planning meeting, the steps of the SOP was followed. The Control Room Operator informed the station operators of a power failure at Stations #67 and 69. Staff met in the reclamation yard to select the proper generator which was hooked up and taken to the first station. The full SOP was reviewed and the Job Hazard Analysis (JHA) form was signed. The generator was taken to each station in sequence and the process discussed. As a result of this test, the processes and conditions were much better understood. PNM cut-outs were identified and processes understood that would restore power without hooking up the generator. Additional cables were acquired and attached to each generator to provide assurance the proper cables were immediately available during an emergency. Then, in FY2017, PNM power was shut down at vacuum stations #57 and 68 in the North Valley and the stations were powered using portable generators. In FY2018, the same was done for vacuum stations #61-64, 66 and 69 in the South Valley. When power was lost in FY2019, the processes were understood and smoothly implemented.

Appendix 6Five-Day Letter for 2018-06-04 Overflow

Albuquerque Bernalillo County Water Utility Authority

Field Division Collection System Section 4201 Second Street SW Albuquerque, New Mexico 87105

June 8, 2018

Ms. Nancy Williams Water Enforcement Branch (6EN_WC) U.S. Environmental Protection Agency, Region 6 1445 Ross Avenue, Suite 1200 Dallas, Texas 75202-2733

SUBJECT: Docket No. VI-92-1129- NPDES Permit No. NM 0022250

Dear Ms. Williams:

Enclosed is a copy of a condition report documenting a collection system overflow. The overflow occurred at 2842 Arno St. SE on June 4, 2018 at 4:24 p.m. U.S. Environmental Protection Agency was notified by an email on June 5, 2018 at 1:53 a.m. New Mexico Environment Department received verbal notification on June 5, 2018 at 1:48 a.m. Pueblo of Isleta received verbal notification June 5, 2018 at 1:50 a.m.

The same piping failure resulted in four spills that are addressed as a single SSO. See the attached memo SSO - June 4.6, 2018 - 2842 Arno SE that describes the SSO and response. Attached is a second notification issued for the same location. Because the spill was not complete when first reported, the final spill volume is 1,535,550 gallons.

If further information is needed, please call Angelo R. Baca, Collection System Asst. Superintendent, Field Division, at (505) 289-3435.

acerely, John M. Stomp III Chief Operating Officer. Vater Utility Authority JMS: arb Enclosure(s)

 Cc: Sandra Gabaldon, NM Env. Dept. Surface Water Quality Bureau Governor, Pueblo of Isleta
 Ramona Montoya, Pueblo of Isleta
 Mark Holstad, Collection System Manager, Field Division
 Angelo R. Baca, Collection System Asst. Superintendent, Field Division
 Mark Kelly P.E. Manager, Compliance Division

<u>Chair</u> Trudy E. Jones City of Albuquerque Councilor, District 8

Vice Chair Debbie O'Malley County of Bernalillo Commissioner, District 1

Pat Davis City of Albuquerque Councilor, District 6

Timothy M. Keller City of Albuquerque Mayor

Klarissa J. Peña City of Albuquerque Councilor, District 3

Steven Michael Quezada County of Bernalillo Commissioner, District 2

Lonnie Talbert County of Bernalillo Commissioner, District 4

Ex-Officio Member Pablo R. Rael Village of Los Ranchos Board Trustee

Executive Director Mark S. Sanchez

Website www.abcwua.org



Memo

To:	John M. Stomp III, Chief Operating Officer
From:	Mark Holstad, Chief Engineer, Collection Section – Field Division
CC:	Email & Attachment to Five-Day Letter
Date:	June 8, 2018
Re:	SSO – June 4-6, 2018 – 2842 Amo SE
3 <u>1</u>	

Overview

The subject SSO was caused by a structural collapse of the pipe between manholes M14-971 and N14-061. Due to topography, i.e., the lowest upstream manhole ring and cover, the spill discharged from manholes M14-473 and -474. This report addresses:

- The recurring nature of successive spills resulting from the collapses occurring on the same line segment.
- The total volume of spilled sewage.
- The total time (duration) that spilling occurred.
- The response to mitigate, control, contain and remove the resulting spilled sewage.

See the Location Sketch below.

Recurring Nature of Successive Spills and Total Volume Spilled

The line segment from M14-971 to N14-061 had been found to be severely corroded and a construction project was underway to rehabilitate the line under Project No. 849.023 but the line collapsed before the rehabilitation could be completed. This location is severely restricted in terms of digging up a collapsed line. There are two railroad spurs, one used daily, two fuel pipe lines, one natural gas line, and an overhead electric line with pole adjacent to the collapse. Between the daily train-induced vibrations and the non-cohesive blow sand, the excavations were very unstable and repeatedly collapsed. Flow was maintained as much as possible by excavating as much as possible given the site restrictions. Due to the continuing and progressive nature of the collapses, the spills are considered the result of one blockage. In parallel to flow maintenance by excavation, a by-pass pumping system is being installed. The first pump and force main is now in place and additional are being installed.

FIELD DIVISION

The partial flow restoration and diumal flow patterns resulted in the following spill durations and volumes.

- June 4, 2018
 - o 4:24 p.m. to 10:38 p.m. (6 hours 14 minutes)
 - o 1,500,000 gallons
- June 5, 2018
 - o 7:29 a.m. to 9:27 a.m. (1 hour 58 minutes)
 - o 29,500 gallons
- June 5, 2018
 - o 9:16 p.m. to 10:17 p.m. (1 hour 1 minute)
 - o 50 gallons
- June 6, 2018
 - o 10:30 a.m. to 1:30 p.m. (3 hours 0 minutes)
 - o 6,000 gallons

The total spill is therefore 1,535,550 gallons and the total duration is 12 hours 13 minutes.

Response to Mitigate, Control, Contain and Remove the Resulting Spilled Sewage

The sewage that spilled between 9:16 p.m. to 10:17 p.m. on June 5, pooled in the street and the sewage was removed along with any solids and HTH was applied. The previous two spills, June 4 from 4:24 p.m. to 10:38 p.m. and June 5 from 7:29 a.m. to 9:27 a.m. and the later June 6 spill were larger and are the topic of the remainder of this report.

These three spills flowed overland west to Broadway and, after ponding, were captured by storm inlets and flowed through the storm drain in Wesmeco and discharged to the hard-lined portion of the San Jose Drain and flowed downstream. The San Jose Drain converts to a soft-lined earth channel just south of Woodward. A temporary earth berm was in place just south the railroad spur that crosses the drain approximately 1,600 feet south of Woodward. Flow was captured starting about 7 p.m. at this berm and did not get any further downstream.

The San Jose Drain is owned by the City of Albuquerque. Kevin Daggett, COA Storm Water Section Manager, was contacted and informed of the issue and the steps being taken. Because Mr. Daggett was not immediately available, David Harrison, COA Engineering Division Manager, was first contacted and Mr. Harrison contacted Supervisor Juan Mendoza, who met Carlos Romero, Gravity Superintendent, and me onsite. Both Mr. Daggett and Mr. Mendoza stated it was OK to strengthen the existing berm. Mr. Daggett stated it was acceptable to place as many additional berms as deemed necessary and to treat the spill with HTH. Spills were therefore treated with HTH.

The spill reached the temporary berm shortly after 7 p.m. on June 4.

TLC, the current emergency on-call contractor was mobilized. TLC was directed to install a berm just downstream of Woodward on the downstream end of the hard-lined San Jose Drain and to pump into the 15" sanitary sewer line in Woodward. This sewer line drains west away from the blocked interceptor and to the unimpacted Valley Interceptor. The berm was placed about 9 p.m. and pumps were placed and pumping commenced shortly thereafter. This new berm prevented any further run-off to the softlined channel. The existing downstream berm was then strengthened. Both berms held throughout and prevented any downstream flow.

The next moming, June 5, at approximately 5:50 a.m. a ponded depth of 3 feet was measured in the soft-lined channel at the railroad spur. That day a total of ten Water Authority Vactors and five Atlas Pumping trucks removed water from the soft-lined channel. At 6:50 p.m. it was observed that all ponded water, with exception of scattered puddles, had been removed.

Required Response and Steps Taken

As noted on Page 7 of the OERP, circumstances presumed to require reporting to the Ground Water Quality Bureau (GWQB) will be a sewage spill on pervious area that:

- 1. Is ponded more than 24 hours and
- 2. At a depth of more than 12 inches over an area of more than 0.1 acre.

Since sewage was not ponded more than 24 hours in the pervious portion of the San Jose Drain, GWQB reporting is not required per the OERP. Ponding greater than 12" did not occur elsewhere.

The spill was contained to the COA's San Jose Drain. Per page 11 the OERP, because the spill did not reach an MRGCD facility or the Rio Grande, no additional calls were required beyond coordination with the COA and the typical 12-hour notification calls.

Summary

This report is prepared to be an attachment to the singular five-day letter.

Four spills in quick succession occurred resulting from the same collapsing interceptor segment, therefore it was determined appropriate to consider this as one SSO and to address this incident in one five-day letter.

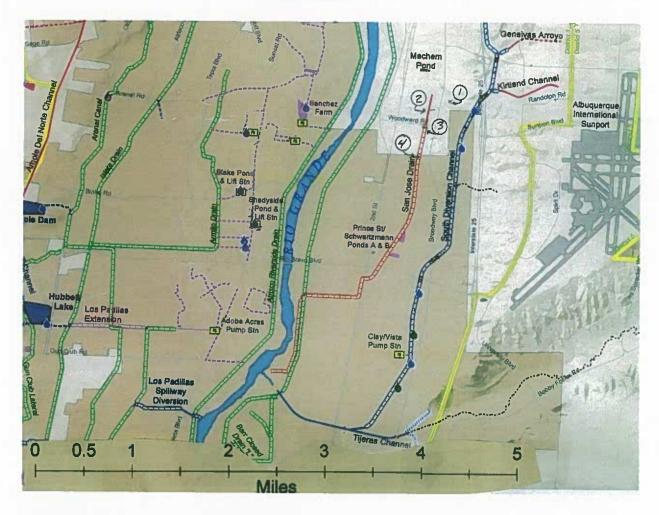
It is noted that without efforts to remediate the collapse the spill would have continued unabated for the full period and much more sewage would have been spilled.

The OERP was followed throughout with additional contact information gathered since the last update. See

http://www.abcwua.org/uploads/FileLinks/145d206bb1ee48bc9346bb61b177ceca/OERP_2017_4_14.pdf

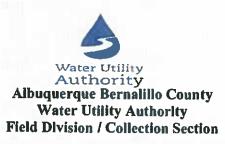
The COA owns the San Jose Drain and associated storm drain that was impacted by this spill. Kevin Daggett with the COA was contacted multiple times and kept apprised throughout. Mr. Daggett concurred with the mitigation steps taken.

Location Sketch



Excerpt from Maintenance Responsibility Map Keyed Notes

- 1. Approximate spill location from manholes M14-473 and -474.
- 2. Approximate location spill discharged to hard-lined portion of San Jose Drain.
- 3. Approximate location of berm installed to hold spill on hard-lined channel. Sewage pumped from here to the 15" sanitary sewer in Woodward.
- 4. Approximate location of existing berm that blocked spill from continuing downstream. All spill was contained upstream of this berm.



SSO NOTIFICATION

1 - 1
This is (Reporting party's name) Arlo Genzales with the Albuquerque Bernalillo County Water Utility
Authority, Permit # NM0022250. J am reporting a Sanitary Sewer Overflow (SSO) that occurred at
(SSO address) 2942 A-No ST SE on (Date of SSO) 6/4/19
The time of the SSO was reported at (Time SSO reported) 4:24 AM PM and was stopped at
approximately (Date SSO was stopped / Time) 6/4/18 1/0:38 AM PM. There was
approximately (Estimated volume) (50,000 gallons of raw sewage spilled into the (Ultimate discharge
location for SSO) Arroyo (Concraine)
The actions taken (Remedy of what actions taken to clean the area) EXCALATE (TLC) TO
The actions taken (Remedy of what actions taken to clean the area) $EXCauar e(/cc) + o$.
restore Flow, capture wind, wast Area, Remove Solids,
Example: Ultimate Discharge Location-(Arroyo (Concrete), Arroyo (Dirt), Parking Lot, Storm Sewer, Street
(Pavement), Street (Dirt), Rio Grande, Conservancy Ditch/Drain, and Yard.
Example: Action Taken-(Combination Cleaning, Captured WW, Removed Pool WW / Wash Down Area / Treated
with Chlorine, and Removed Solids).

E-mail: EPA / Environmental Protection Agency
Date / / / / / / / / / / / / / / / / / / /
Date 6/5/18 Time AM D
Call: NMED / New Mexico Environment Department
Date <u>4/5//8</u> Time <u>1/505)827-0187</u> Time <u>1/505)827-0187</u> File <u>1/505)827-0187</u> Date <u>4/3</u> AM E E Left Message Or PM □ Spoke with
PM D D Spoke with

Call: Pueblo of Isleta
Date 6/5/19 (505) 869-7565
Time 1/1:50 AM C Left Message Or
PM 🖾 🗆 Spoke with

X
Reporting Signature E SSO Notification Rev. 01 07 2015 - ARB



SSO NOTIFICATION

This is ((Reporting party's name) A lo from 2 - / with the Albuquerque Bernalillo County Water Utility
	ty, Permit # NM0022250. I am reporting a Sanitary Sewer Overflow (SSO) that occurred at
(SSO a	ddress) 2842 Arno ST SE on (Date of SSO) 6/5/18
The time approxi	e of the SSO was reported at (Time SSO reported) $\underline{9}: \underline{16}$ AM $\underline{17}$ AM
location	n for SSO) <u>STreet (Dirt)</u> .
The act	ions taken (Remedy of what actions taken to clean the area) Remove pool ww/
tras	ions taken (Remedy of what actions taken to clean the area) <u>Remove pool wwl</u> . I area, HTH, Revove Solids
Example	e: Ultimate Discharge Location-(Arroyo (Concrete), Arroyo (Dirt), Parking Lot, Storm Sewer, Street
	ent), Street (Dirt), Rio Grande, Conservancy Ditch/Drain, and Yard.
(i atom	ony, easer (Diry, No Grande, Conservancy Dich/Drain, and Taru.
Evenet	Action Tokon (Combination Objection Objection Date (Date)
	e: Action Taken-(Combination Cleaning, Captured WW, Removed Pool WW / Wash Down Area / Treated
With Chi	lorine, and Removed Solids).
*****	***************************************
E-mail:	EPA / Environmental Protection Agency [Incline F-Mail Address: r6_npdes_reporting@epa.gov
	Date <u>6/5//9</u> Time <u>// : 4/0</u> AM []
	PM
*******	***************************************
Call:	NMED / New Mexico Environment Department
	Date 6/5//8 Time 1.33 AM I Left Message Or PM Spoke with
	Time // : 33 AM D E Left Message Or
	PM L DSpoke with
*******	***************************************
Call:	Pueblo of Isleta (505) 869-7565
	Date 6/5//3
	Time //: 36 AM C Left Message Or PM C D Spoke with
**	······································
-+	X

F SSO Notification Rev. 01 07 2015 - ARB

Reporting Signature

Water Utility Authority	Water U Field Division	e Bernalillo County Itility Authority A / Collection Section Ition Report	SR# 2515 WO# 199701 Date Reported 614 18 Time Crew Notified 4:24 AM Time Crew Arrived 4:35 AM Supervisor Arlo Gonzales PM
Name	perty Owner or Reporter	Phone Numbe	r
Reported Location Address No. <u>2942</u> Intersecting Street	From Manhole MAP # MH# MI 4971 Street Name Arno	To Manhole MAP# MH # W / 4 0 6 /	Line Type. RCP ZCP ZCP ZCP ZCP ZCP ZCP ZCP Z
40 Sewer Bac	kup Comments:		con't. on back
Time of SSO 44 Time SSO Stopped 1 Duration of SSO 12 hm Amount Spilled (estimated) Amount Removed (estimated) Amount Removed (estimated) Evidence Of Fish Kill No Evidence Of Advers Observed Or Evidence of Observed Or Evidence of Storm Drain Clean Yes No Wash water applie If yes, provide informate Address/Intersection of It Broad any blood SF Address/Intersection of R San Jose Drain Amount Recovered (estin 2,000	ACT e Health / Env. Impact of Env. Impact of Human Contact ning Documentation d and removed from Storm Drain ion below nlet to the Storm Drain (Mesmeco D. SE Removal from Storm Drain	Sewag or fold Street (Dirt) Street (Pavement) Yard Other MAdditional Vactor Unit #(s)/84701,024701, 174702, 154701,124701, 174702, 154701,144700, If so, provide information be 084704, 10877501,174 Reason for Second Vactor or Caftured Wast Additional (5) Attack	(s) Called Out - Operator(s) Chris P., Robert L., Josecther - Operator(s) Chris P., Robert L., Josecther - Samon S., Mike L., Tom S. Steve elow Paul S., Louis O., Daniel H.
List Damage	Comments Be Taken I Ac Freq. Ir Ac Istream I 24 I 24 IIIIIIIIIIIIIIIIIIIIIIIIIIIII	Yes No	ictures Taken ome Have Basement ome Have Back Water Valve Elevation Below Upstream Manhole

FROM MANHOLE	TO MANHOLE WO# /9870/ FLOW MAP# Albuquerque Bernalillo
M14971	DIRECTION County Water Utility Authority Field Division / Collection Section
DEPTH RIM TO INVERT FEET INCHES	FEET INCHES MTH 6 DAY 5 YEAR
NOTIFIED <u>4:24</u> PM 2	ARRIVED 4:35 PM COMPLETED 6:30 PM
BLOCK # 2342 STR	EET Arro DESIGNATION 57 QUAD 5
REPORTED AS 40 SEWER BACK-UP - NO DAMAGE 41 SEWER TROUBLE 42 SEWER OVERFLOWING	43 SEWER LEAK 48 PROPERTY BACK-UP / DAMAGE 44 CAVE-IN 49 FOLLOW UP 45 BROKEN MANHOLE COVER 52 SEWER ODOR 46 MISSING MANHOLE COVER 62 LINESPOT 47 LOOSE MH COVER 63 MH NOT TO GRADE
PROBLEM FOUND	□ 44 CAVE-IN □ 49 FOLLOW-UP ∞ □ 45 BROKEN MANHOLE COVER □ 52 SEWER ODOR
41 SEWER TROUBLE 41 SEWER OVERFLOWING	46 MISSING MANHOLE COVER 62 LINESPOT
43 SEWER LEAK	□ 47 LOOSE MANHOLE COVER □ 63 MH NOT TO GRADE □ 48 PROPERTY BACK-UP/DAMAGE □ AS AUTHORITY SEWER □ NAS NON-AUTHORITY SEWER □ NAS NON-AUTHORITY SEWER
CAUSED BY	□ EQ EQUIP FAILURE □ RGS RAGS □ SGG SAND, GRIT OR GRAVE □ GR GREASE □ RN BAINFALL □ RP BLIED
CO CONSTRUCTION CU CAUSE UNKNOWN DB DEBRIS	GR GREASE RN RAINFALL BP BURP LF LIF FAILURE RK ROCKS V VANDALISM RGR ROOTS / GREASE RT ROOTS
ACTION TAKEN CC COMBINATION CLEANING CHUTE	CC CONTINUED wedge DT COMMANDER BR Hydrosurge RCS
CATCH SCREEN PIPE WOLF ULTIMATE CHISEL	ROOT SAW RP REMOVED POOLED WASTEWAT RS REMOVED SOLIDS RS REMOVED SOLIDS
	IN INSPECT IN SI SETTLEMENT INVESTIGATED IS LINESPOT SM SMOKE TEST
PRIMUS SUPER FLUSHER	Image: Mark MH COVER REPLACED Image: Mark MH COVER REPLACED Image: Mark MH COVER SECURED Image: Mark MH COVER SECURED Image: Mark MH COVER SECURED Image: Mark MH COVER SECURED Image: Mark MH COVER SECURED Image: Mark MH COVER SECURED
GRENADE JPX SLED ASY	PN PUBLIC NOTIFICATION ET EMPTY DEBRIS TANK PO PUMP OUT CT CUT INTRUDING TAP
JETSCAN OTHER	PIPE LENGTH PIPE BLOCKAGE DISTANCE FROM MANHOLE DISTANCE FROM DS MH TO MANHOLE 637 FT TO BLOCKAGE
PIPE SIZE 10 INCH 4 INCH 12 INCH	□ 18 INCH □ 24 INCH □ 36 INCH □ 60 INCH □ 20 INCH □ 27 INCH □ 42 INCH □ 66 INCH
7 INCH 15 INCH 8 INCH 16 INCH	21 INCH 30 INCH 48 INCH 72 INCH 22 INCH 33 INCH 54 INCH 78 INCH
PIPE TYPE CIP CAST II CPN STAND DIP DUCTIL	ARD CONCRETE D PVC POLYVINYL CHLORIDE
VEHICLE NO.	RADIO # EMPLOYEE ID # 2 1 3 3
REMARKS TEG EVICA	inted to Restore Flow DI MORE ON BA