



# CMOM Annual Report 2022



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## **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 this Capacity, Management, Operations and Maintenance (CMOM) Plan. The Permit was renewed in CY2019 with an effective date of December 1, 2019.

The CMOM Plan consists of the following documents:

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

The CY2022 CMOM Annual Report follows previous FY2013-17 and CY2017-21 reports. The previous reports, as well as the most recent, can be accessed at <https://www.abcwua.org/sewer-system-overview/>.

Appendix 5 provides a summary of goals established in this CY2022 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 Permit was renewed effective December 1, 2019. The following are the Permit requirements that impact the collection system.

1. The Water Authority shall report all overflows with a (monthly) Discharge Monitoring Report (DMR). (Part I, Paragraph D).
2. Overflow reporting requirements were unchanged for EPA and NMED. (Part I, Paragraph D).
3. Overflow reporting requirements were modified for spills impacting the Pueblo of Isleta (POI) were modified in accordance with the “Pueblo of Isleta Reporting Requirement” which is a subsection of the renewed Permit. (Part I, Paragraph D and “Pueblo of Isleta Reporting Requirement”.)
4. The Water Authority shall continue to implement and update (if necessary) the CMOM plan. (Part II, Paragraph E.)

The full permit is available at

<https://cloud.env.nm.gov/water/pages/view.php?ref=6881&k=fd428af5b1>

## CMOM Program Self-Assessment

EPA states (see [https://mwrld.org/sites/default/files/documents/USEPA\\_3-cmomselfreview.pdf](https://mwrld.org/sites/default/files/documents/USEPA_3-cmomselfreview.pdf)): “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 <https://www.abcwua.org/sewer-system-overview/> 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 new NPDES Permit was effective December 01, 2019, allowing for an update to the Industrial Pretreatment Program. This update started with an amendment to the SUO, board approved on July 05, 2021. This amendment updated the FOG section to include solids and standardize the terminology to match plumbing code and industry standards and include Hydromechanical Grease Interceptor (HGI) exclusions to the 25% rule. Fats, Oils, and Grease (FOG) is now Fats Oils, Grease and Solids (FOGS). Grease Removal Systems (GRS) are now referred to as Grease Interceptors (GI). HGIs being more efficient GIs are allowed to hold up to 50% grease and solids. The FOGS Policy and ERP are currently under revision to reflect SUO changes and bolster both documents.

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 Interceptor (GI) 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 GI 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 GI 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 GI. 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. The [Sewer Use and Wastewater Control Ordinance](#) was updated and approved by the Board in July 2021. The Pretreatment Program documents including the FOGS and Enforcement Policies have been revised to match the Ordinance updates and are expected to be submitted to EPA for approval once the legal review is complete, by July 2023.

## **FOG Enforcement**

In CY2022, the Water Authority Pretreatment Program had 1,898 compliant FSEs out of 2,184 FSE sites for a compliance rate of 87%. Eight hundred and forty (840) FSE inspections were conducted with 494 passing, and 346 failing. Of the 346 failed inspections, 317 Notices of Violation were issued. One-hundred and ninety-seven (197) of the 317 violations were resolved, and the remainder are outstanding.

In response to SSOs, fourteen (14) FSE inspections were conducted with eight (8) passing and six (6) failing. Of the six (6) failed inspections, three (3) Notice of Violations were issued and all were corrected before issuance of violations.

In addition, Water Authority Pretreatment personnel distributed 840 FOG brochures to FSEs at every inspection. FOG brochures were also issued to single-family residences and apartment complexes upstream of the grease caused SSOs.

## SSO Analyses

### Permit Requirements

The Permit requires a CMOM Plan. The Plan 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.

**Table 1 Sewer Trouble Definitions**

<b>Sewer Trouble Definitions</b>		
10-40	Sewer Backup	A gravity line blockage that does not result in a spill, 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.

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.

**Table 1 Types of Causes for SSOs**

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

## 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 CY2022. (Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.)

**Table 2 Summary of Causes from SSO Study**

<b>10-42,10-48 Causes</b>	<b>Total</b>	<b>% of Total</b>
Burp	0	0%
Cause Unknown	0	0%
Cause Unknown/Debris	0	0%
Construction	1	3%
Construction/Debris	0	0%
Construction/Line Failure	0	0%
Debris	1	3%
Debris/Grease	2	6%
Equipment Failure	1	3%
Grease	10	32%
Grease/Rags	1	3%
Grease/Sag in Line	0	0%
Line Failure	4	13%
Manhole	0	0%
Rags	0	0%
Roots/Grease/Rags	0	0%
Roots/Grease	0	0%
Roots/Debris	1	3%
Roots/Intruding Tap	1	3%
Roots/Line Failure	1	3%
Roots	8	26%
Sag in Line	0	0%
Vandalism	0	0%
<b>Grand Total</b>	<b>31</b>	<b>100%</b>

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. This indicates the condition of infrastructure where SSOs are occurring. 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 3 Summary Mitigations from SSO Study**

<b>10-42, 10-48 Mitigations</b>	<b>Total</b>	<b>% of Total</b>
No Follow Up Needed	4	13%
Pretreatment Notified	1	3%
Pretreatment Notified/Short Interval	1	3%
Rehab/Replace	2	6%
Rehab/Replace/No Follow Up Needed	1	3%
Short Interval	16	52%
Short Interval/Rehab/Replace	1	3%
Short Interval/Special Instructions	4	13%
Short Interval/Special Instructions/Pretreatment Notified	1	3%
Special Instructions	0	0%
<b>Grand Total</b>	<b>31</b>	<b>100%</b>

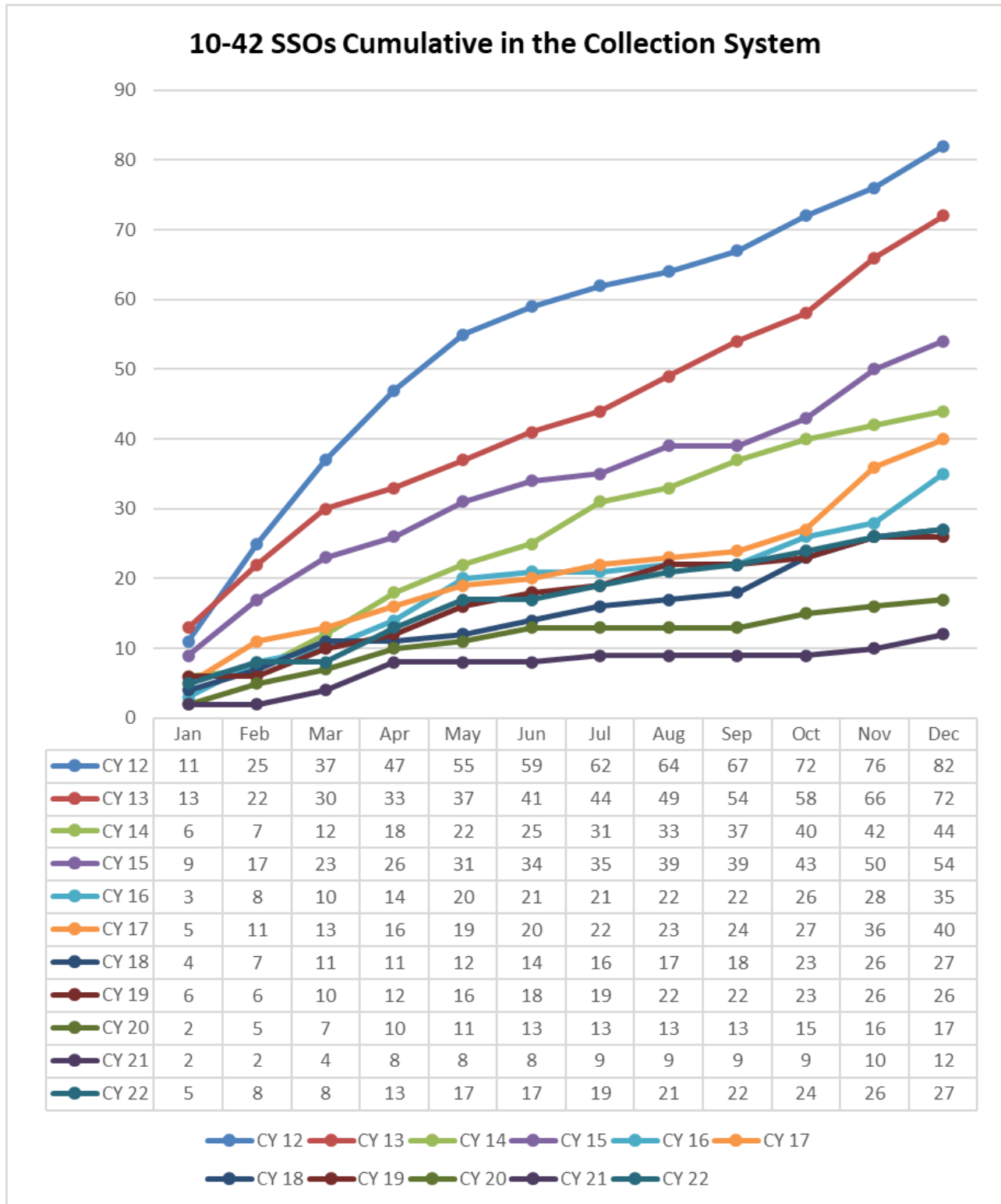
### **Volume Spilled and Recovered**

Via the OERP, the Water Authority has implemented a policy of capturing spills and documenting actions. Appendix 1 provides the Ultimate Discharge Location for each reported SSO. Appendix 2 provides estimated spill volumes and volumes recovered for 27 reported SSOs for CY2022. Of the spill volume estimated not to be recovered, none were identified as directly reaching the Rio Grande. It was estimated that approximately 44% of the estimated spill volume was recovered in CY2022 as shown in Appendix 2. One spill, on July 10, 2022, did reach the Rio Grande. This is discussed below in Actions Implemented and On-Going Programs.



## SSO Tabulation & Analysis

Figure 1 shows the cumulative 10-42s by month for CY2012-22.



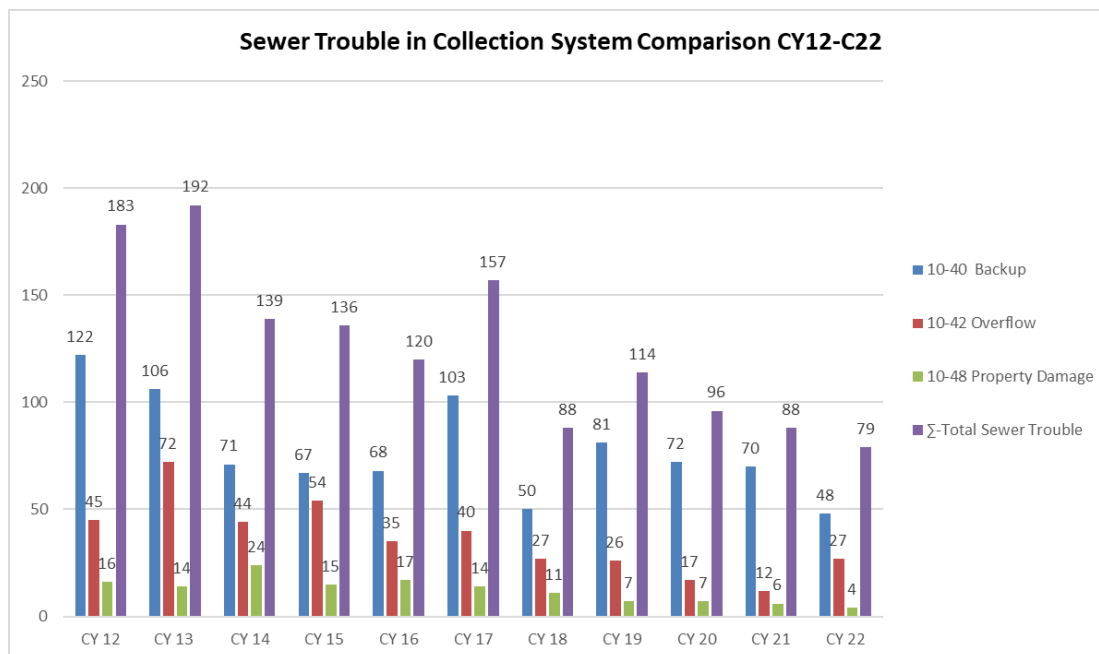
**Figure 1 Reportable SSOs**

Appendix 1 contains a list of every 10-42 and 10-48 event in CY2022. 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, 1.1, 1.1, 0.7, 0.5, and 1.1 for CY2012-22 respectively.

Figure 2 shows the total sewer troubles, i.e., 10-40s, -42s, and -48s by year for CY2012-22. 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. As indicated in Appendix 1, there were no burps during CY 2022.



**Figure 2 Sewer Trouble Comparison**

## **Actions Implemented and On-Going Programs**

### **General**

Below are gaps that were identified in the CY2020 CMOM Report and were closed in CY2022, or are on-going programs, or both. In addition to the commitments made in the CMOM Report, in CY2022, the following additional actions were taken to expand the Water Authority's ability to operate and maintain the system.

The Water Authority's Public Affairs section continued to support SSO prevention efforts and the FOG Policy in CY2022. Appendix 3 identifies media specifics for water bill inserts, and social media public outreach efforts.

### **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.

The Water Authority has long had an FSE flier in English. An FSE flier in Spanish was developed and implemented in CY2019 and an FSE flier in Vietnamese was developed and implemented in CY2020. The Water Authority continues to distribute these fliers to all FSEs and residential units during routine inspections and SSO investigations to continually improve education to the rate payers on the negative impacts of FOG. In CY2022 Pretreatment improved FOG inspections by using advance inspection tools. The goal for CY2023 is to tabulate the number of fliers distributed during inspections as well as find community outreach opportunities for FOG related education.

### **Pilot Manhole Monitoring Project**

The Water Authority initiated in CY2022 a pilot study of manhole monitoring. The intent is to study flow monitoring and evaluate if this technology may be appropriate for use in the Water Authority's Collection System. This pilot project will help the Water Authority meet its CMOM Plan commitment to maintain a program to continuously improve in terms of SSO reduction. Ten monitors were obtained, and ten locations were selected for deployment. In this pilot study, the flow level is continuously monitored in each manhole and, utilizing proprietary software, flow patterns are diagnosed, and advance alerts provided of forming downstream blockage. In event of a blockage, post event diagnostics may provide insights on the mechanism of a specific blockage, e.g., was it caused by tree roots or gravel deposits, etc. The ten selected locations focused on Short Interval lines. This is a two-year pilot project, with completion expected at the end of FY2024.

### **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.

## 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 in-house 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 3 provides the CCTV goal for a ten-year basis and the actual CCTV inspection through CY2022. The CY2022 portion of this recommendation is complete. The CCTV program will continue. Anticipated schedule:

1. FY23: Large diameter unlined concrete pipe.
2. FY24: 5% of the small diameter.
3. FY25: 5% of the small diameter.
4. FY26: 5% of the small diameter.
5. FY22: 5% of the small diameter.
6. FY23: Large diameter unlined concrete pipe.



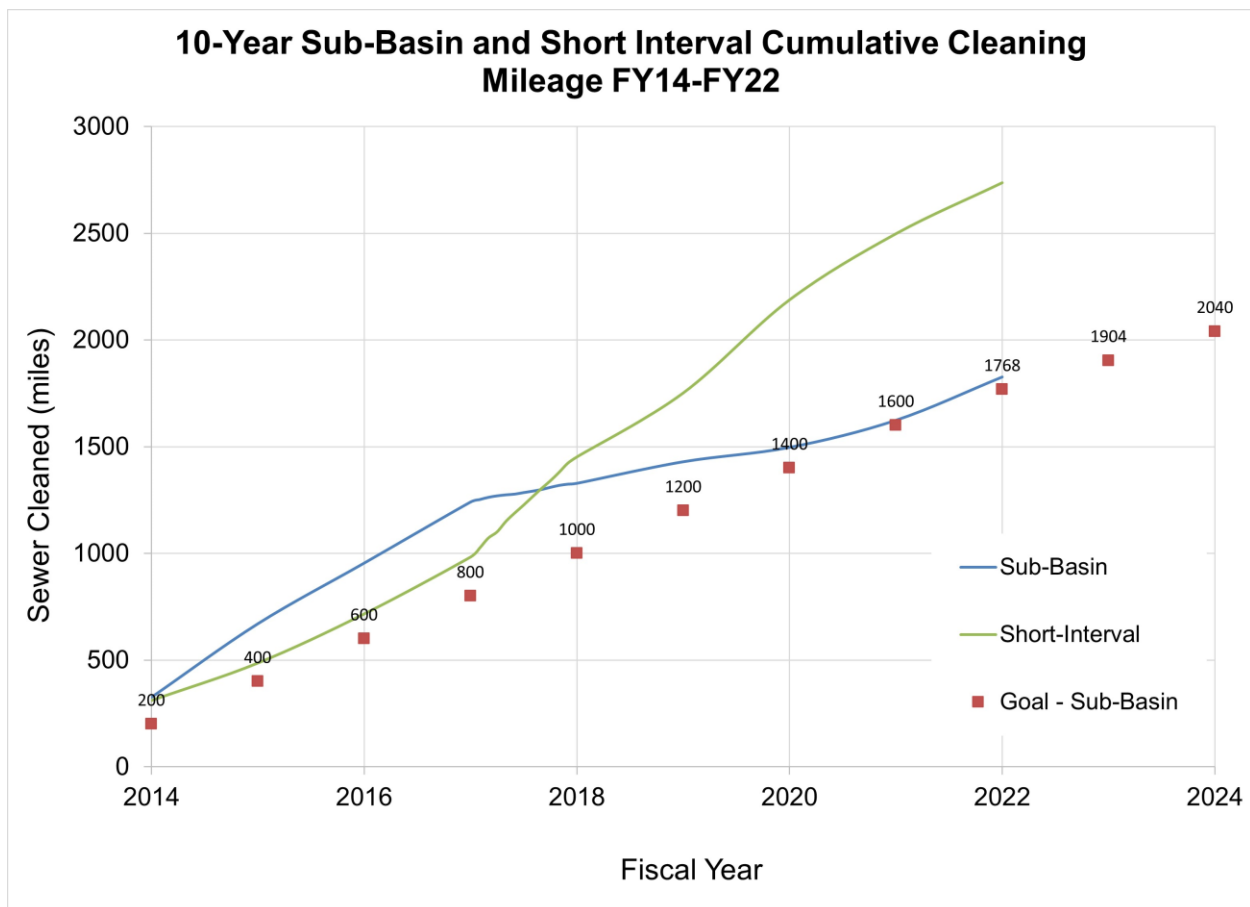
**Figure 3 Small & Large Diameter Sewer CCTVed vs. Ten-Year Goal**

## 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.”

In the CY2021 CMOM Report, the Water Authority established a temporary goal of cleaning all small diameter lines, i.e., Sub-Basin program, every fifteen years, rather than the previously established ten-year goal. Water Authority studies indicate that Short Interval lines consistently experience a higher SSO rate than the Sub-Basin lines. This indicates that even more cleaning of Short Interval lines, with a commensurate decrease in Sub-Basin cleaning, will result in a net reduction of total SSOs in the system. The Water Authority will monitor SSO rates and extend efforts to increase the effectiveness of the cleaning program.

Figure 4 shows the actual cleaning performed by fiscal year. The modified Sub-Basin goals are shown starting with CY 2022.



**Figure 4 Small Diameter Sewer Cleaned vs. Ten-Year Goal**

## **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.

In April 2022 the dual 30” Force Mains were excavated at 2 locations determined by the earlier “Smart Ball” (in-line data collection sphere) inspections. A more focused assessment of the pipeline sections was performed by means of non-destructive electromagnetic and ultrasonic transducer testing. Two additional ARVs were replaced on the east (SWRP) portion of the force mains.

## **Overflow Emergency Response Plan (OERP)**

This is an on-going program to update the OERP as required. In CY2022, no modifications were made were made to the OERP.

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 4 provides the OERP which was in effect at the end of CY2022. The most current version of the OERP is posted to [http://www.abcwua.org/Sewer\\_System.aspx](http://www.abcwua.org/Sewer_System.aspx)

The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and the Water Authority continued coordination in 2022. AMAFCA provided significant assistance in response to the July 10, 2022 SSO, discussed below.

## **July 10, 2022 SSO**

A major SSO occurred starting on July 10, 2022.

The Five Day Letter is attached in Appendix 6. The Letter describes the cause, SSO hydraulics and locations, SSO volume and portion captured and returned the sanitary sewer, clean up, public notifications, the Category One notifications made to the Pueblo of Isleta, and corrective actions.

The Five Day Letter identified a gap and associated mitigation measures. This gap is further discussed immediately below.

The Letter notes that AMAFCA provided significant assistance during the SSO, containing approximately 3 million gallons of the spill in an AMAFCA pond from which the sewage was then pumped back into the sewer system.

Partly in response to the SSO, the EPA issued an Administrative Order (AO) on November 1, 2022. The Water Authority responded on November 30, 2022. Both the AO and response are attached in Appendix 6.

## **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.

### **GIS Gap**

The SSO was caused by the collapse of a concrete interceptor wrongly identified as rehabilitated in the Water Authority's geographic information system (GIS). This gap is discussed in both the Five Day Letter and the AO Response. The Water Authority queried GIS to identify 125 rehabilitated concrete interceptor segments for which adequate back up documentation, either CCTV or record drawings, was not available. These lines were all inspected using CCTV, with completion in January 2023.

### **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 1      Sanitary Sewer Overflow Analysis Table**

Type			DMR													SSO Team Study		Enforcement		
10-42	10-48	10-42 & 10-48	Maximo WO #	Diameter	Repeat within 1 year	Date of SSO	Time of SSO	Duration (HH:MM)	Location	Estimated Volume (gallons)	Reported Cause of Overflow	Observed Environment Impacts	Action Taken	Ultimate Discharge Location	Volume Recovered (gallons)	Cause	Mitigation	Pretreatment Follow Up Requested	FSEs Visited	Notice of Violation
X			1833294	RPIPE301887	N N	1/13/2022	8:25 AM	0:30	8901 BLUEWATER RD NW	750	GR	NEAH	CC/HTH/CWW/WD	AC	750	GR	SI	X	3	1
X			1836030	RPIPE303167	N N	1/17/2022	9:56 AM	3:14	1200 RIVERVIEW DR NW	4850	GR	NEAH	CC/HTH/RS/WD	O (BOSQUE)	0	LF	RH			
X			1836032	RPIPE293080	N N	1/17/2022	12:01 PM	2:59	1111 RIO GRANDE BLVD NW	455	GR	NEAH	CC/HTH/PO/RCS/WD	PST	400	GR	SI/PT	X	1	1
X			1843143	RPIPE308426	N N	1/22/2022	10:30 AM	2:00	13800 GRADY CT NE	500	RT	NEAH	CC/CWW/RP/WD	O (DIRT SHOULDER)	200	RT	SI*/SP			
X			1843549	RPIPE308426	Y Y	1/23/2022	8:30 AM	1:45	13800 GRADY CT NE	300	RT	NEAH	CC/HTH/CWW/RP/WD	O (DIRT SHOULDER)	150	RT	SI*/SP			
X			1869755	RPIPE277694	N N	2/14/2022	1:58 PM	2:42	1010 LAS LOMAS RD NE	25	DB	NEAH	CC	PST	0	RT/LF	RH			
X			1860376	RPIPE814554	N N	2/5/2022	7:28 AM	2:39	8624 HAWK EYE RD NW	7950	DB/GR	NEAH	CC/HTH/WD	AD	0	GR	SI			
X			1874966	RPIPE264559	Y N	2/20/2022	3:35 PM	1:05	8512 HILTON AVE NE	325	GR	NEAH	CC/HTH/CWW/RP/RS/WD	PST	325	RT/DB	SI/SP/PT	X	11	4
X			1959392	RPIPE305967	Y Y	4/13/2022	7:30 PM	1:01	HIDDEN VALLEY RD SE & FOUR HILLS RD SE	9400	GR/RGS	NEAH	CC/HTH/WD	AD	0	RT	SI/SP			
X			1959628	RPIPE857844	N N	4/14/2022	12:15 AM	2:45	717 FENNEL CT SE	50	DB	NEAH	CC/HTH/WD	YD	0	LF	SI			
X			1967508	RPIPE269616	N N	4/20/2022	8:09 AM	1:36	6956 FOREST HILLS	288	RGS	NEAH	CC/HTH/IN/RP/WD	PST	100	GR	SI			
	X		1972883	RPIPE267705	N N	4/24/2022	8:01 AM	2:29	12000 BAJA DR NE	7450	RGR/RGS	NEAH	CC/HTH/CWW/RP/RS/WD	AC	5000	RT	SI			
X			1975608	RPIPE866882	Y N	4/26/2022	5:29 PM	0:36	2331 DON LUIS RD SW	180	GR	NEAH	CC/HTH/WD	YD	0	GR	SI			
X			1985590	RPIPE306841	Y N	5/1/2022	11:45 AM	1:20	HIDDEN VALLEY DR SE & SAGEWOOD CT SE	150	RT	NEAH	CC/HTH/WD	PST	0	RT	NF			
X			1998641	RPIPE273996	Y N	5/10/2022	2:15 PM	0:52	KATHRYN AVE SE & DICKERSON DR SE	260	GR	NEAH	CC/HTH/CWW/WD	PST	200	GR	SI			
	X		2015760	RPIPE263525	N N	5/23/2022	10:10 AM	0:20	3913 LOUISIANA BLVD NE	200	RGS	NEAH	CC/HTH/PO/RP/RS/WD	PL/PST	200	LF	SI			
X			2017488	RPIPE274851	N N	5/24/2022	12:17 PM	0:28	MANZANO ST NE & COPPER AVE NE	60	GR	NEAH	CC/HTH/RS/WD	PST	60	GR	PT	X	2	1
	X		2064401	RPIPE267634	N N	6/15/2022	9:00 PM	1:00	6404 PEPPENDINO ST. NE	NA	DB	NA	CC	NA	NA	RT/IT	SI			
	X		2109416	RPIPE303298	N N	7/10/2022	6:30 PM	6:06	6100 ILIFF RD NW 64TH & HANOVER	6744100	LF	OEEI	CC/CWW/RP/RS/WD	RG	3000000	LF	RH/NF			
X			2114507	RPIPE262528	N N	7/13/2022	11:43 AM	0:55	8403 PHOENIX AVE NE	75	RGS	NEAH	CC	PST	65	GR	SI			
X			2151515	RPIPE304085	N N	8/7/2022	5:39 PM	1:21	14334 MARQUETTE DR NW	405	GR	NEAH	CC/HTH/WD	PST	405	RT	SI			
	X		2162412	RPIPE275636	N N	8/13/2022	6:39 PM	2:00	8516 CENTRAL AVE SE	NA	GR/RT	NA	CC	NA	NA	GR	NF			
	X		2166325	RPIPE272927	N N	8/16/2022	8:50 AM	1:46	1014 VALENCIA DR SE	NA	GR	NA	CC	NA	NA	GR	SI			
X			2183956	RPIPE308300	N N	8/26/2022	9:10 AM	4:30	13501 DURANT AVE NE	2800	RT	NEAH	CC/HTH/CWW/BR/RP/WD	PST	2000	RT	RH/SI			
X			2203532	RPIPE252698	N N	9/5/2022	11:25 AM	0:35	6250 PASO DEL NORTE NE	6600	GR/RGS	NEAH	CC/HTH/WD	AD	1000	RGS/GR	SI/SP	X	3	1
X			2271061	RPIPE306349	Y N	10/15/2022	11:20 AM	0:40	MARY ELLEN ST NE AND ASPEN AVE. NE	400	RGR	NA	CC/HTH	SD	0	GR/DB	SI			
X			22919267	RBUFFERT246537	N N	10/27/2022	9:17AM	6:20	KIRSTEN RD SW & COORS BLVD SW	100	EQ	NA	REP	O (DIRT SHOULDER)	0	EQ	NF			
X			2314320	RPIPE276777	N N	11/9/2022	8:04AM	1:09	COAL AVE & OAK ST. SE	65	GR/RGS	NA	CC/HTH/RP/WD	PST	50	DB	SI			
X			2349378	RPIPE292737	N N	11/29/2022	7:56PM	0:44	10311 AVENIDA VISTA CERROS NW	220	CO	N/A	CC/HTH	SD	0	CO	NF			
X			2377479	RPIPE273770	Y N	12/19/2022	3:12PM	0:28	LA VETA DR & NAMBE RD NE	50	DB	N/A	CC/HTH	PST	N/A	DB/GR	SI			
	X		2385793	RPIPE306600	N N	12/27/2022	5:30PM	1:00	14312 CAMINO DEL REY	N/A	CU	N/A	CC	N/A	N/A	RT	SI			



**CY2022 10-42 SPILL VOLUME AND VOLUME RECOVERED**

<b>Maximo WO #</b>	<b>Date of SSO</b>	<b>Location</b>	<b>Estimated Volume (gallons)</b>	<b>Volume Recovered (gallons)</b>	<b>Volume Not Recovered</b>	<b>% Recovered</b>
1833294	1/13/2022	8901 BLUEWATER RD NW	750	750	-	100%
1836030	1/17/2022	1200 RIVERVIEW DR NW	4,850	-	4,850	0%
1836032	1/17/2022	1111 RIO GRANDE BLVD NW	455	400	55	88%
1843143	1/22/2022	13800 GRADY CT NE	500	200	300	40%
1843549	1/23/2022	13800 GRADY CT NE	300	150	150	50%
1869755	2/14/2022	1010 LAS LOMAS RD NE	25	-	25	0%
1860376	2/5/2022	8624 HAWK EYE RD NW	7,950	-	7,950	0%
1874966	2/20/2022	8512 HILTON AVE NE	325	325	-	100%
1959392	4/13/2022	HIDDEN VALLEY RD SE & FOUR HILLS RD SE	9,400	-	9,400	0%
1959628	4/14/2022	717 FENNEL CT SE	50	-	50	0%
1967508	4/20/2022	6956 FOREST HILLS	288	100	188	35%
1972883	4/24/2022	12000 BAJA DR NE	7,450	5,000	2,450	67%
1975608	4/26/2022	2331 DON LUIS RD SW	180	-	180	0%
1985590	5/1/2022	HIDDEN VALLEY DR SE & SAGEWOOD CT SE	150	-	150	0%
1998641	5/10/2022	KATHRYN AVE SE & DICKERSON DR SE	260	200	60	77%
2015760	5/23/2022	3913 LOUISIANA BLVD NE	200	200	-	100%
2017488	5/24/2022	MANZANO ST NE & COPPER AVE NE	60	60	-	100%
2109416	7/10/2022	6100 ILIFF RD NW 64TH & HANOVER	6,744,100	3,000,000	3,744,100	44%
2114507	7/13/2022	8403 PHOENIX AVE NE	75	65	10	87%
2151515	8/7/2022	14334 MARQUETTE DR NW	405	405	-	100%
2183956	8/26/2022	13501 DURANT AVE NE	2,800	2,000	800	71%
2203532	9/5/2022	6250 PASO DEL NORTE NE	6,600	1,000	5,600	15%
2271061	10/15/2022	MARY ELLEN ST NE AND ASPEN AVE. NE	400	-	400	0%
22919267	10/27/2022	KIRSTEN Rd SW & COORS Blvd SW	100	-	100	0%
2314320	11/9/2022	COAL AVE & OAK ST. SE	65	50	15	77%
2349378	11/29/2022	10311 AVENIDA VISTA CERROS NW	220	-	220	0%
2377479	12/19/2022	LA VETA DR. & NAMBE RD. NE	50	-	-	0%
<b>Grand Total</b>			<b>6,788,008</b>	<b>3,010,905</b>	<b>3,777,053</b>	<b>44%</b>

## Appendix 3 FOG Advertising Campaign

Our CY2022 FOG advertising campaign/public outreach was supported by the following activities:

FOG Bill inserts (210,000 printed and distributed every month; estimated impressions of 840,000 with duplications):

December 2022

November 2022

February 2022

January 2022



















































TRASH Bill inserts (210,000 printed and distributed every month; estimated impressions of 420,000 with duplications):

November 2022

March 2022



## Social Media Posts – Facebook/Instagram

	It may be the cold and flu season, but it'...	Boost post	...	Dec 29, 2022	 	100 Accounts
	It may be the cold and flu season, but it'...	Boost post	...	Dec 29, 2022	 	191 Accounts
	<b>Ad completed</b> REMEMBER...fats, oils and grease shoul...	Boost again	...	Dec 22, 2022	 	2.3K Accounts
	'Tis the season for holiday food and deli...	Boost post	...	Dec 19, 2022	 	115 Accounts
	'Tis the season for holiday food and deli...	Boost post	...	Dec 19, 2022	  	115 Accounts
	<b>Ad completed</b> It may be the cold and flu season, but i...	Boost again	...	Nov 29, 2022	 	2.1K Accounts
	REMEMBER...fats, oils and grease should ...	Boost post	...	Nov 22, 2022	 	77 Account
	REMEMBER...fats, oils and grease should ...	Boost post	...	Nov 22, 2022	 	440 Account
	It's finally here—Thanksgiving week! If yo...	Boost reel	...	Nov 21, 2022	 	153 Account
	<b>Ad completed</b> It's finally here—Thanksgiving week! If y...	Boost again	...	Nov 21, 2022	  	2.3K Account
	REMEMBER...fats, oils and grease should ...	Boost post	...	Oct 22, 2022	 	581 Account
	Fats, oils, and grease should never go do...	Boost post	...	Sep 11, 2022	 	217 Account
	Labor Day Weekend is just around the co...	Boost post	...	Aug 28, 2022	  	174 Account
	Labor Day Weekend is just around the co...	Boost post	...	Aug 28, 2022	 	123 Account
	Is it okay to flush an elephant down the ...	Boost post	...	Aug 11, 2022	 	102 Accounts



## Data - Social Media Posts

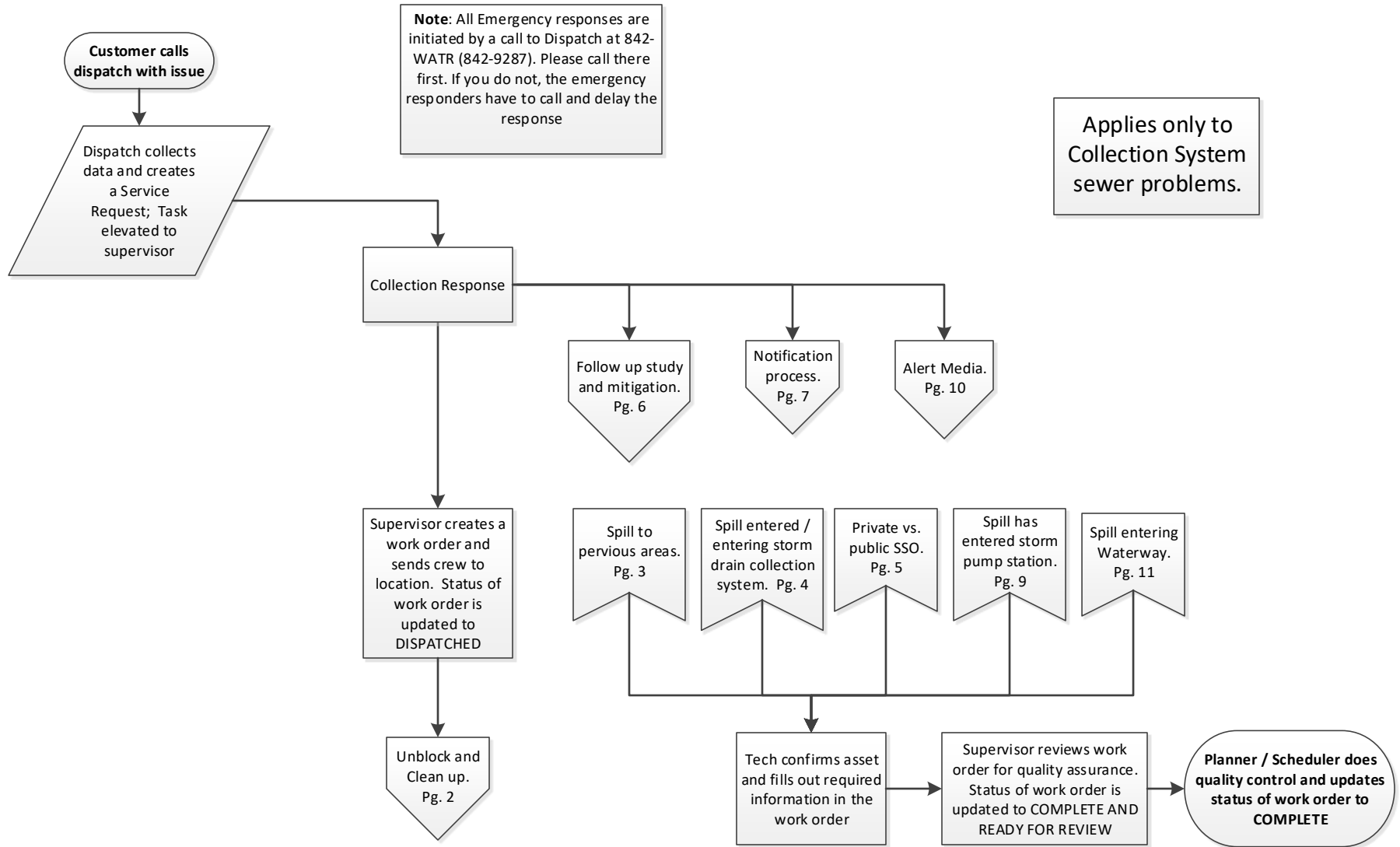
DATE PUBLISHED	PEOPLE REACHED	ENGAGEMENTS	LIKES AND REACTIONS	COMMENTS	SHARES
29-Dec-22	100	---	5 LIKES	0	0
29-Dec-22	191	4	4 REACTIONS	0	0
22-Dec-22	2.3 K	345	213 REACTIONS	12	18
19-Dec-22	115		10 LIKES	0	0
19-Dec-22	115	8		0	2
29-Nov-22	2.1 K	461	167 REACTIONS	14	34
22-Nov-22	77		5 LIKES	0	0
22-Nov-22	440	25	15 REACTIONS	0	3
21-Nov-22	153		14 LIKES	1	0
21-Nov-22	2.3 K	275	21 REACTIONS	0	3
22-Oct-22	581	40	22 REACTIONS	3	3
11-Sep-22	217	5	5 REACTIONS	0	0
28-Aug-22	174	4	2 REACTIONS	0	1
28-Aug-22	123		9 LIKES	0	2
11-Aug-22	102	1		0	0
20-Apr-22	317	16	8 REACTIONS	1	3
25-Feb-22	121	3	3 REACTIONS	0	0
24-Feb-22	192	5	4 REACTIONS	0	0
31-Jan-22	517	31	15 REACTIONS	3	6
22-Jan-22	239	8	7 REACTIONS	0	1



# Overflow Emergency Response Plan

12-1-2019

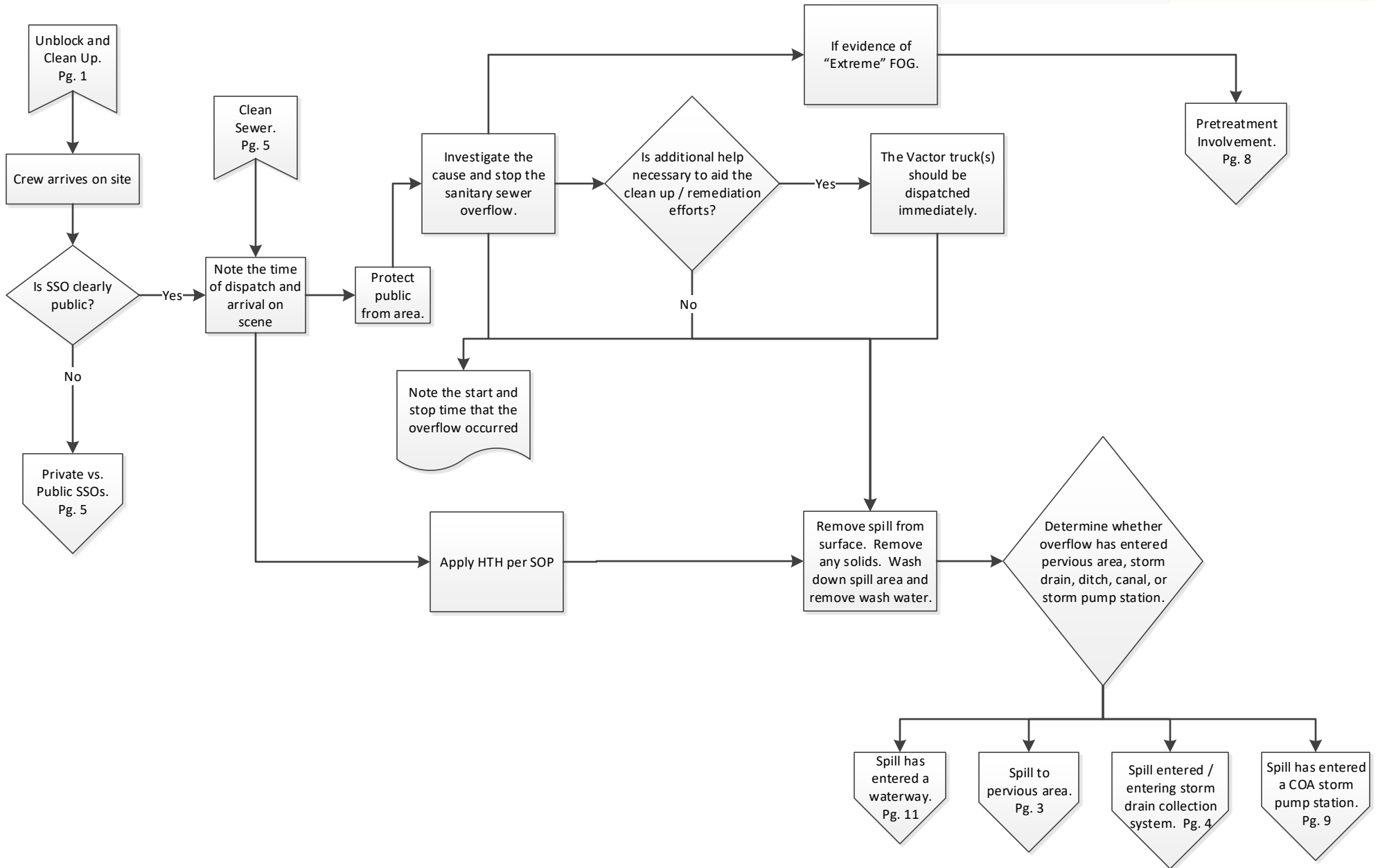
Albuquerque Bernalillo County Water Utility Authority

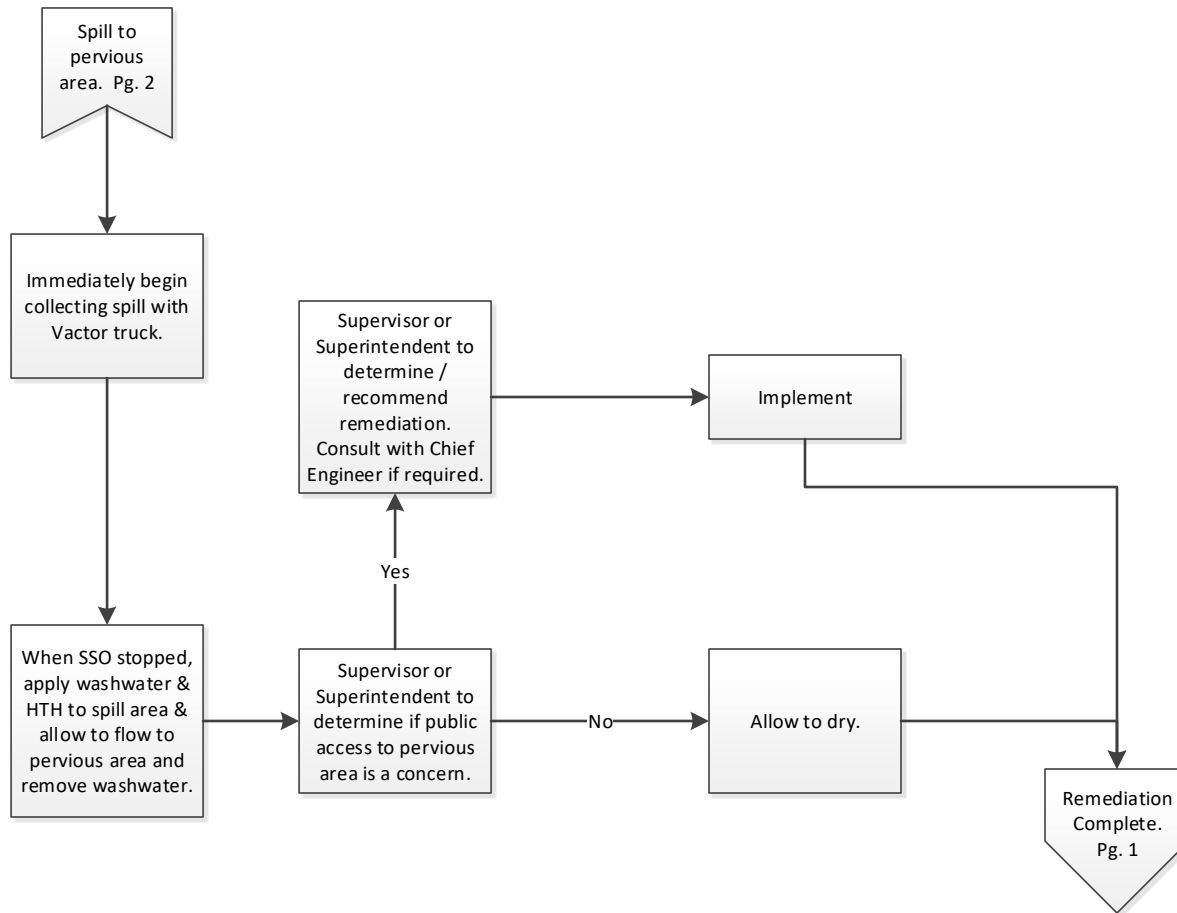


# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority



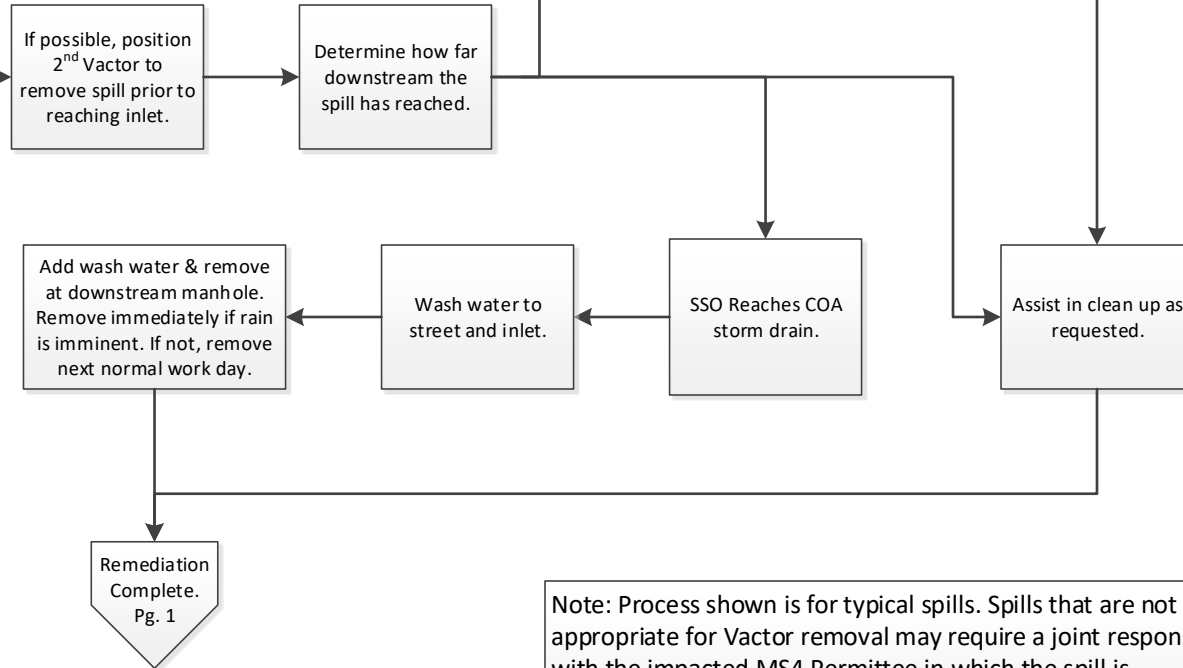


# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority

Spill entered / entering storm drain collection system. Pg. 2



SSO Reaches	Contact			
	Name	Position	Office	Cell
AMAFA Facility	Jerry Lovato*	Executive Engineer	884-2215	362-0020
Bernalillo County Facility	Patrick E. Chavez#	Storm Drainage Maintenance Manager	848-1505	934-2704
NMDOT Facility	Thomas Kratochvil	District 3: Assistant District Engineer-Maintenance	N/A	228-8169
COA Facility	Kathy Verhage **	Senior Engineer	768-2778	803-8058

Note: Process shown is for typical spills. Spills that are not appropriate for Vactor removal may require a joint response with the impacted MS4 Permittee in which the spill is captured, treated, and determined appropriate for release.

\*If Jerry Lovato is not immediately available, call:  
 Nolan Bennett: Field Engineer (505) 301-6941  
 Sal Hernandez: Superintendent (505) 366-8209

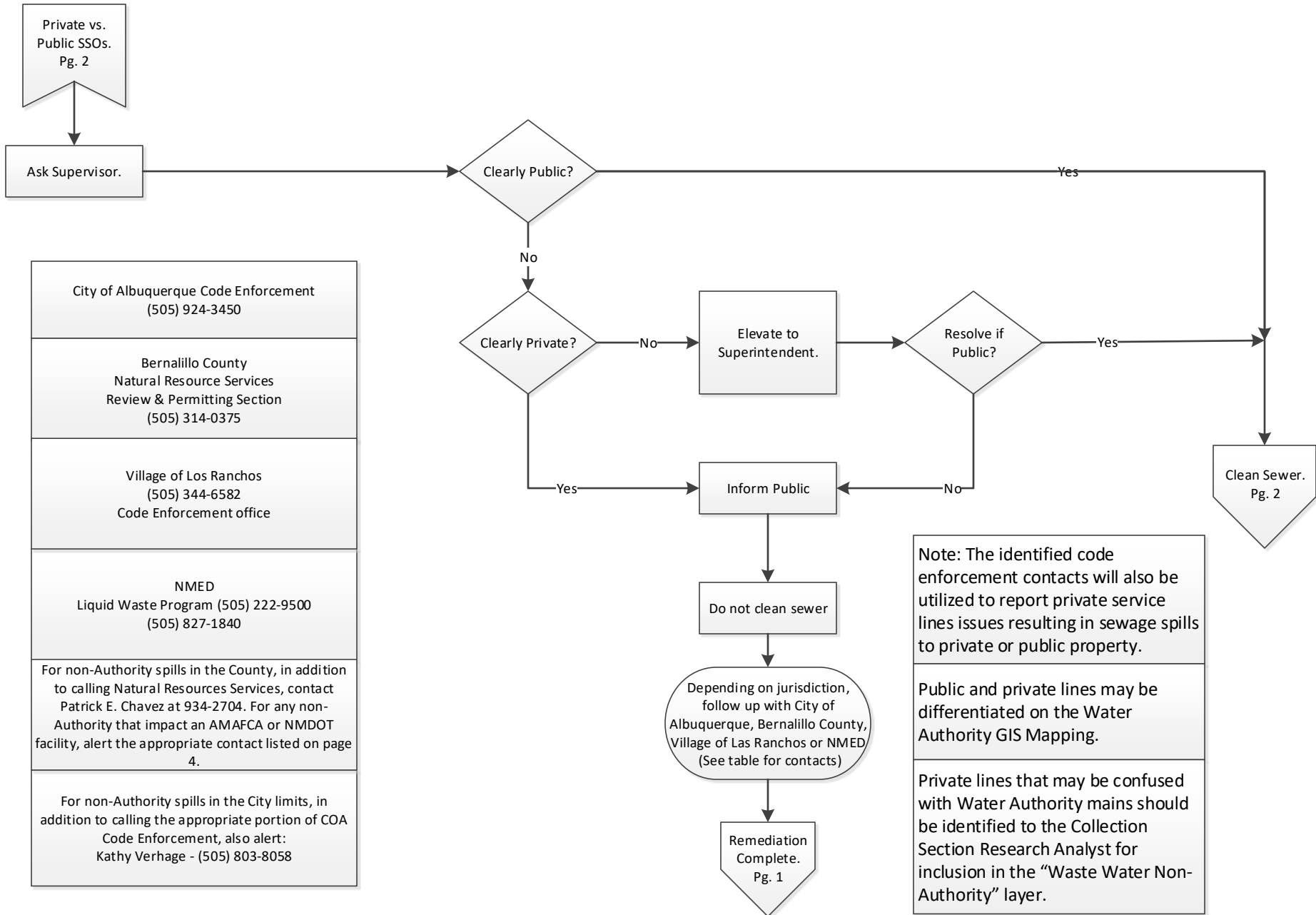
\*\*If Kathy Verhage is not immediately available, call:  
 David Harrison: Engr. Div. Manager (505) 238-4158  
 Carl Rinkenberger: O&M Manager (505) 250-4334  
 Daniel Tapia: O&M Supt (505) 228-6874

#If Patrick E. Chavez is not immediately available, call:  
 Kali Bronson: Stormwater Program Compliance Manager (505) 401-1779

# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority

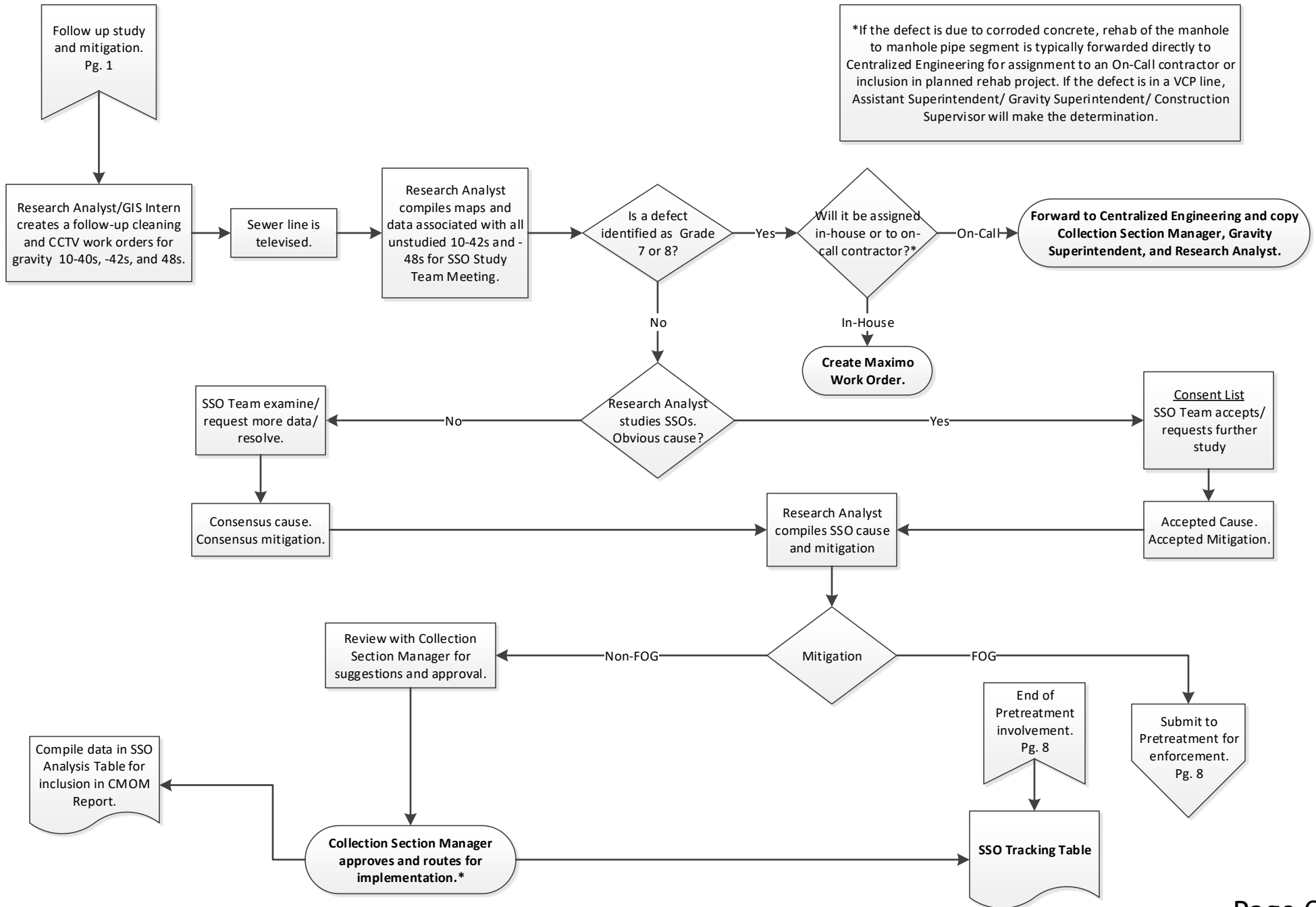




# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority

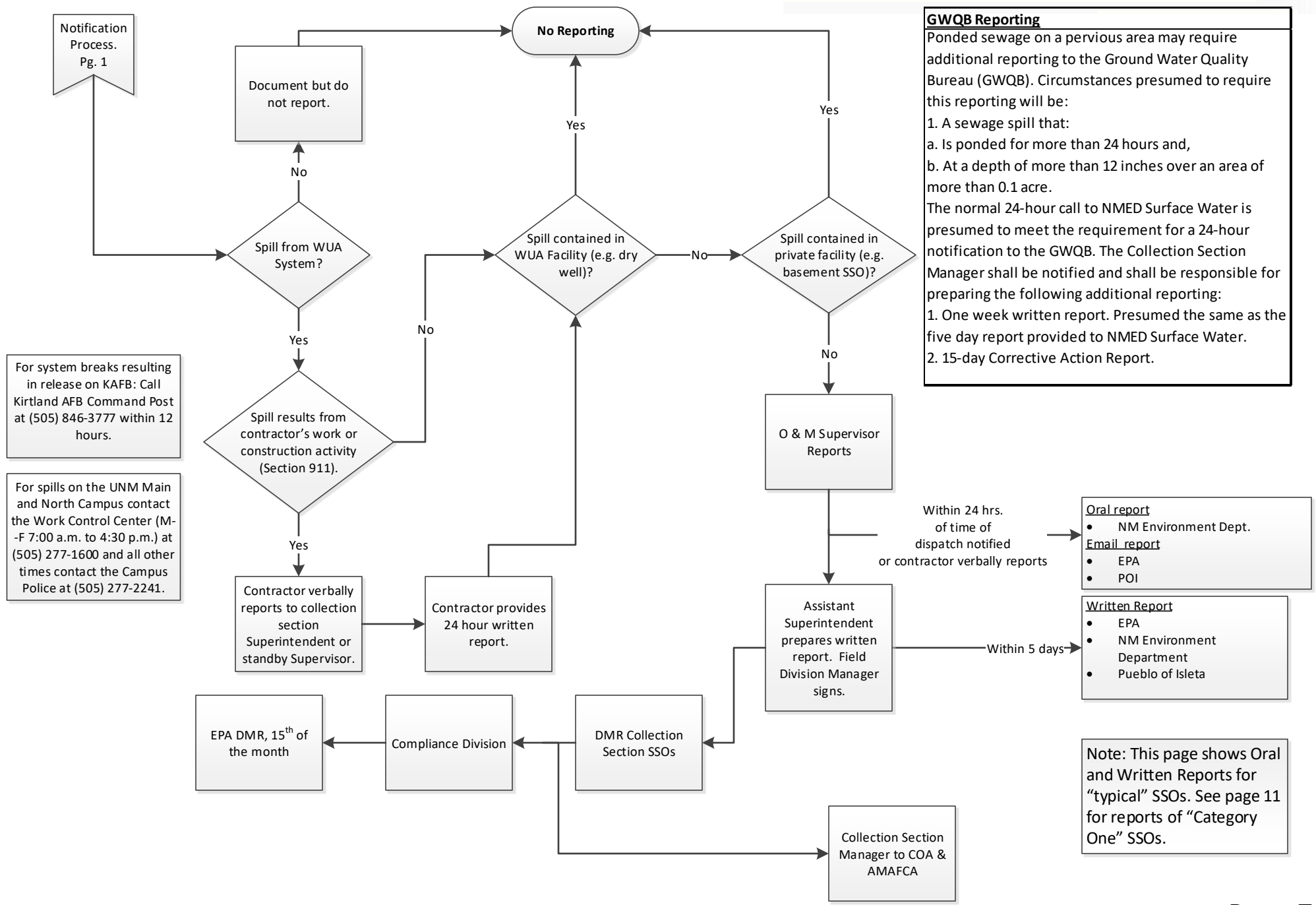


# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority

**GWQB Reporting**  
 Pondered sewage on a pervious area may require additional reporting to the Ground Water Quality Bureau (GWQB). Circumstances presumed to require this reporting will be:  
 1. A sewage spill that:  
 a. Is ponded for more than 24 hours and,  
 b. At a depth of more than 12 inches over an area of more than 0.1 acre.  
 The normal 24-hour call to NMED Surface Water is presumed to meet the requirement for a 24-hour notification to the GWQB. The Collection Section Manager shall be notified and shall be responsible for preparing the following additional reporting:  
 1. One week written report. Presumed the same as the five day report provided to NMED Surface Water.  
 2. 15-day Corrective Action Report.



For system breaks resulting in release on KAFB: Call Kirtland AFB Command Post at (505) 846-3777 within 12 hours.

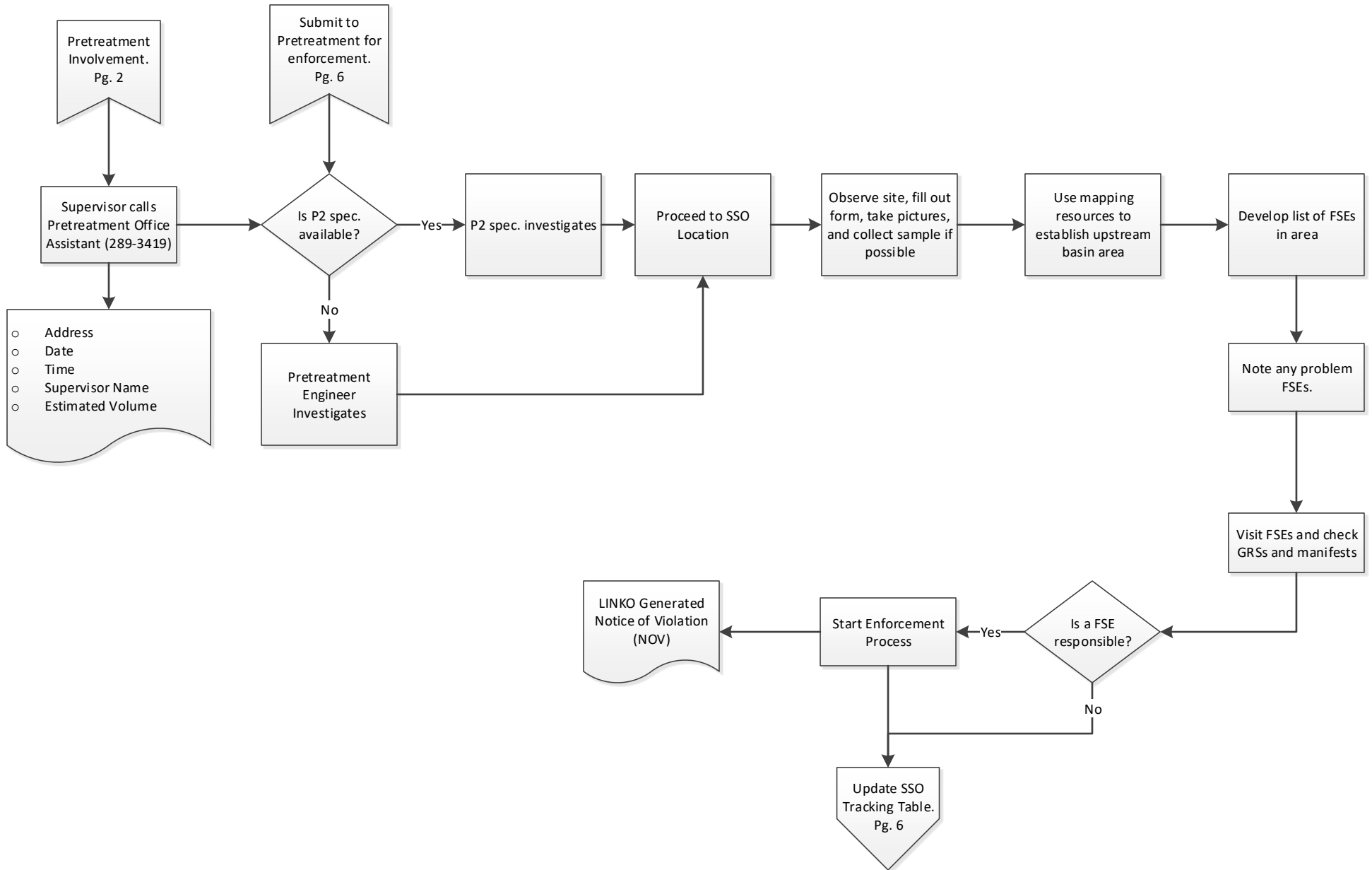
For spills on the UNM Main and North Campus contact the Work Control Center (M-F 7:00 a.m. to 4:30 p.m.) at (505) 277-1600 and all other times contact the Campus Police at (505) 277-2241.

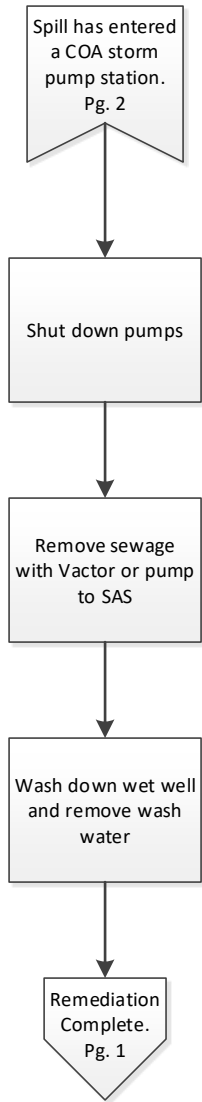
Note: This page shows Oral and Written Reports for "typical" SSOs. See page 11 for reports of "Category One" SSOs.

# Overflow Emergency Response Plan

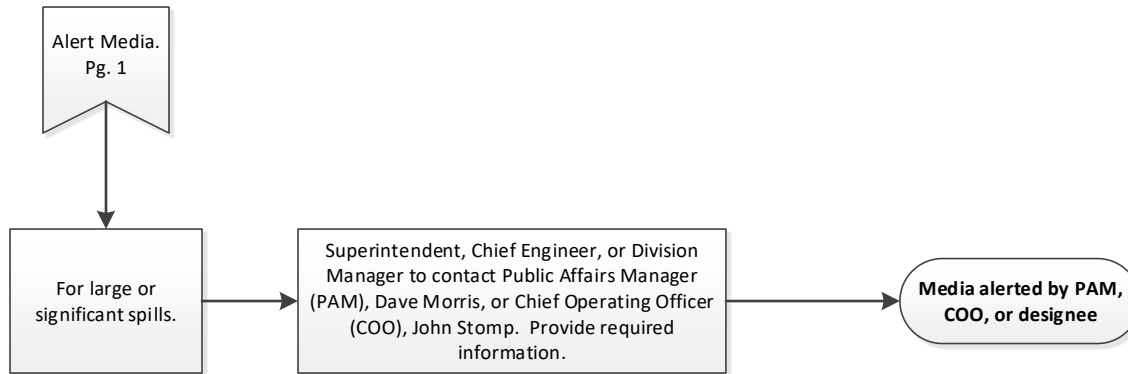
12-1-2019

Albuquerque Bernalillo County Water Utility Authority





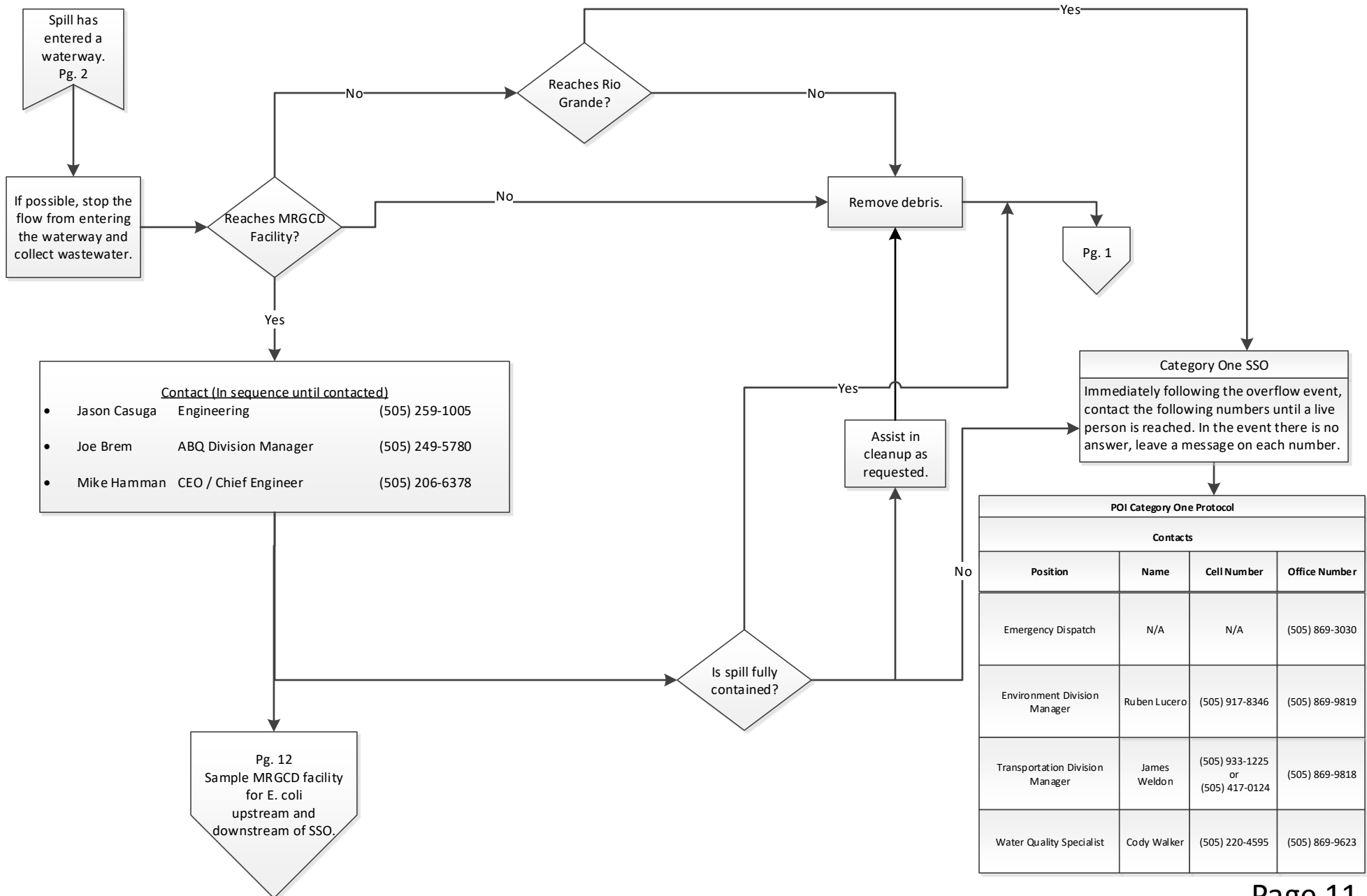
Note: Process shown is for typical spills. Some spills may require a joint response with the City of Albuquerque in which the spill is captured, treated, and determined appropriate for release.



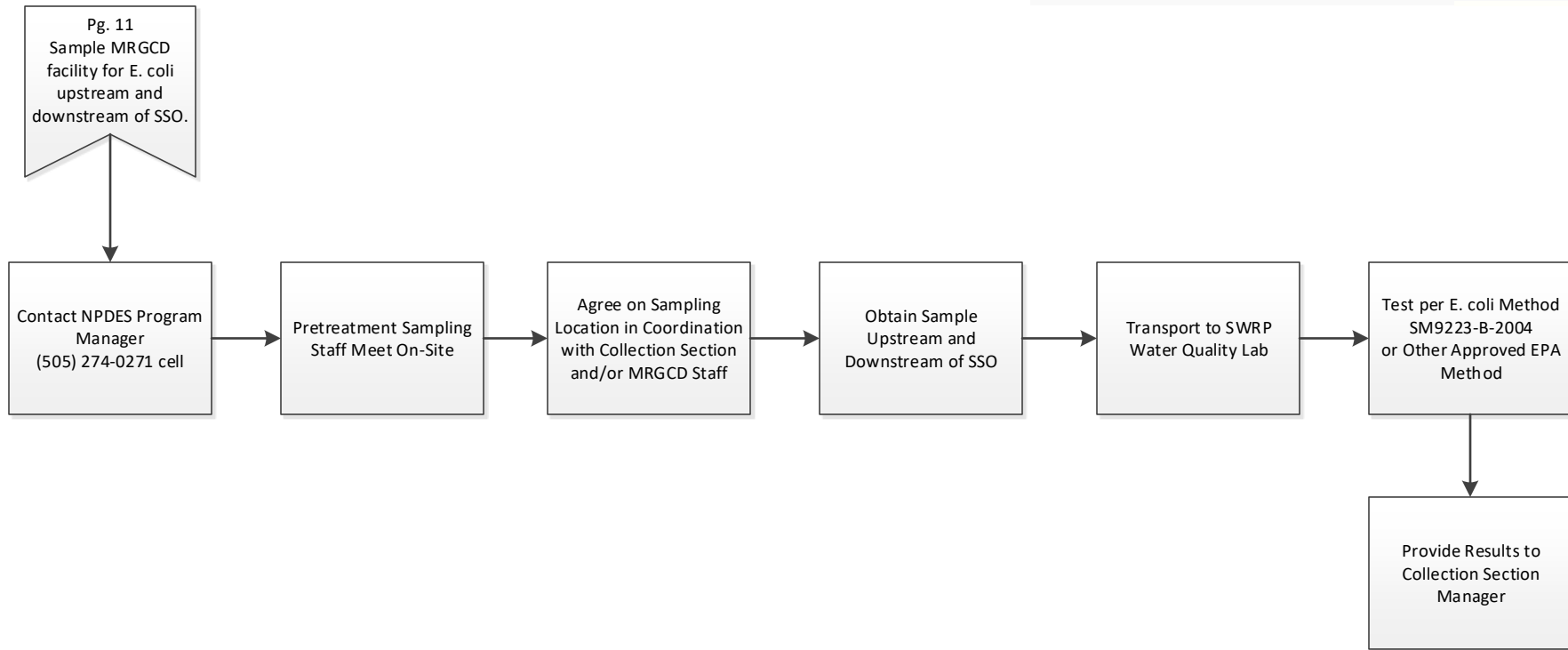
# Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority



POI Category One Protocol			
Contacts			
Position	Name	Cell Number	Office Number
Emergency Dispatch	N/A	N/A	(505) 869-3030
Environment Division Manager	Ruben Lucero	(505) 917-8346	(505) 869-9819
Transportation Division Manager	James Weldon	(505) 933-1225 or (505) 417-0124	(505) 869-9818
Water Quality Specialist	Cody Walker	(505) 220-4595	(505) 869-9623







<b>Goal Summary - CY2022 CMOM Report</b>		
<b>Goal</b>	<b>Timing</b>	<b>Page # for Discussion</b>
Submit FOGS and Enforcement Policies to EPA for approval once the legal review is complete	CY2023	6
CCTV all gravity pipes suffering a blockage. For all SSOs, determine a cause and mitigation and report in the next CMOM report	Annually	7
Public advertising	On-Going	13
Distribute FSE fliers in English, Vietnamese and Spanish, and improve FOG inspections by using advance inspection tools.	On-Going	13
Tabulate the number of fliers distributed during inspections as well as find community outreach opportunities for FOG related education.	CY2023	13
Update OERP	As required	16
CCTV a portion of system	Ten Year goal. Report	14
Clean a portion of the system	Ten Year goal. Report	15
Establish and monitor a temporary goal of cleaning all gravity small diameter lines every fifteen years	CY2022	15
Update frequency of Short Interval cleaning in accordance with system performance and risk factors, maintenance history, and the latest maintenance findings	CY2022	15
Force main inspection program	Annually	16
SSOs: Take steps to decrease and mitigate	On-Going	17

**Appendix 6            July 10, 2022 SSO**

**Five Day Letter - July 15, 2022**

**Administrative Order - November 1, 2022**

**Response to Administrative Order – November 30, 2022**



# Albuquerque Bernalillo County Water Utility Authority

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

July 15, 2022

**Chair**  
Klarissa J. Peña  
City of Albuquerque  
Councilor, District 3

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

Tammy Fiebelkorn  
City of Albuquerque  
Councilor, District 7

Trudy E. Jones  
City of Albuquerque  
Councilor, District 8

Timothy M. Keller  
City of Albuquerque  
Mayor

Charlene Pyskoty  
County of Bernalillo  
Commissioner, District 5

Steven Michael Quezada  
County of Bernalillo  
Commissioner, District 2

*Ex-Officio Member*  
Gilbert Benavides  
Village of Los Ranchos  
Board Trustee

*Executive Director*  
Mark S. Sanchez

*Website*  
[www.abowua.org](http://www.abowua.org)

Ms. Nancy Williams  
US.EPA Region 6  
1201 Elm Street, Suite 500 (ECDWA)  
Dallas, Texas 75270-2102

**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 6100 Iliff Rd. NW on July 10, 2022 at 5:54 p.m. This serves as the 5-day letter to EPA, POI and NMED SWQB and 7-day letter to NMED GWQB.

U.S. Environmental Protection Agency was notified by an email on July 11, 2022 at 4:00 p.m. New Mexico Environment Department received verbal notification on July 11, 2022 at 3:58 p.m. Pueblo of Isleta was notified by an email on July 11, 2022 at 4:00 p.m. and was notified verbally of a Category One SSO immediate notifications were made between 12:45 and 1:00 a.m. on July 11, 2022.

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

Sincerely,

Danielle Shuryn  
Manager Compliance Division, Water Utility Authority

DS: arb

Enclosure(s)

**Cc:** Jason Martinez, Municipal NPDES Specialist, NM Env. Dept. Surface Water Quality Bureau  
Governor, Pueblo of Isleta  
Ramona M. Montoya, Pueblo of Isleta  
Mark Holstad P.E. Collection System Manager, Field Division  
Angelo R. Baca, Collection System Asst. Superintendent, Field Division  
Stanley R. Allred, CFO/COO, Water Utility Authority  
Justin D. Ball, P.G., Bureau Chief - NM Env. Dept. Ground Water Quality Bureau



Water Utility Authority

Albuquerque Bernalillo County Water Utility Authority Field Division / Collection Section

SSO NOTIFICATION

The front page is for SSO Notifications for typical SSOs which does not reach the Rio Grande, or if they reach an MRGCD facility, are fully contained. For SSOs that have or are anticipated to reach the Rio Grande, or reach an MRGCD facility and will not be fully contained, make immediate phone notifications per the back of this form.

This is (Reporting party's name) Angelo Baca with the Albuquerque Bernalillo County Water Utility Authority,

Permit # NM0022250. I am reporting a Sanitary Sewer Overflow (SSO) that occurred at

(SSO address) 6100 Eliff Rd. N.W. on (Date of SSO) 07/10/22

The time of the SSO was reported at (Time SSO reported) 5:54 AM PM and was stopped at approximately

(Date SSO was stopped, Time) On Going : AM PM. There was approximately (Estimated

volume) 8 million Total gallons of raw sewage spilled into the (Ultimate discharge location for SSO)

5 MG to Rio Grande at I-40 + 3 MG to West Bluff Pond

The actions taken (Remedy of what actions taken to clean the area) On Going Spill.

Major clean up will occur after spill stops.

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, Removed Solids, Bermed Area, and Removed Contaminated Soil).

Email: \* EPA / Environmental Protection Agency & Pueblo of Isleta

Date 7/11/22 Time 4:00 AM PM

Email Distribution Procedure: Xerox Preprogrammed Method: a. Select "Scan To." b. Select "Device Address Book." c. Select contact "SSO, SSO (sso@abcwua.org)." d. Select "Scan." e. Assure Xerox machine confirms form delivery has been "Completed." In the event of Xerox machine being unavailable for use, follow the alternative method below: a. Capture image with device. For example, take a picture using your phone. b. Email image to SSO group (sso@abcwua.org) and Cc yourself to confirm delivery.

Call: NMED / New Mexico Environment Department

Date 7/11/22 1 (505) 827-0187

Time 3:58 AM PM Spoke with Stephanie Martinez

Reporting Signature

## Category One Notifications to Pueblo of Isleta (POI)

A Category One SSO will reach the Rio Grande or will reach an MRGCD facility and is not fully contained. For a Category One SSO, immediately make the following calls in sequence until a live person is reached. Note the time each person was reached or in the event there is no answer, leave a message on each number.

Immediately is understood to mean the following.

1. Follow the current OERP. The current OERP is posted on the public website at [www.abcwua.org/sewer-collection-section/](http://www.abcwua.org/sewer-collection-section/)
2. In the event the spill has reached an MRGCD facility, first call the MRGCD to alert them as they may be able to close off flow and prevent the spill from reaching the POI.
3. The Supervisor will contact their Superintendent or the Collection Section Chief Engineer and jointly make a determination that Category One SSO conditions apply. In the event that the Superintendent and Chief Engineer cannot be contacted, contact the Field Division Manager. They will be responsible for alerting the Chief Operations Officer and / or the Public Information Officer and the Supervisor will complete the remaining actions.
4. Make calls as listed to the POI. The normal verbal notification information will not be fully known, and the calls should be made without all the normal information. Be prepared to tell each POI Representative the following:
  - a. Your name.
  - b. The location of the SSO.
  - c. Where the spill reached. If you do know the name of the drain, provide it. If not, just identify the approximate location and state that a drain has been reached. There can be subsequent calls.
  - d. You will not know the volume. Do not wait to compute this.
  - e. It is very possible the spill is ongoing when you call. It is not necessary to stop the overflow to make the calls.
  - f. If an MRGCD contact has been reached and is mobilizing, provide that information and the name.

POI Category One Protocol <span style="float: right;"><i>Call 7/11/2022</i></span>							
Contacts				Note Time where Applicable			
Position	Name	Cell Number	Office Number	Cell		Office	
				Live Person Reached	Message Left	Live Person Reached	Message Left
1st	Emergency Dispatch	N/A	N/A			12:45 AM	
2nd	Environmental Specialist, Water Quality Control Officer	Ramona Montoya	505.263.5425		12:49 AM		12:51 AM
3rd	Transportation Services Manager	James Weldon	505.933.1225	12:54 AM			
4th	Water Resources Manager	Derek Jarner	505.503.0530		12:58 AM		1:00 AM

.....

**\* Email Addresses:**

SSO email address (sso@abcwua.org) consists of the following Permit required notifications to EPA and POI, as well as other individuals:

National Pollutant Discharge Elimination System (NPDES): [r6\\_npdes\\_reporting@epa.gov](mailto:r6_npdes_reporting@epa.gov)  
 Isleta Pueblo: [notifications@isletapueblo.com](mailto:notifications@isletapueblo.com)





Water Utility Authority

Albuquerque Bernalillo County Water Utility Authority Field Division / Collection Section Condition Report

SR# 23088 WO# 2109416 Date Reported 07/10/2022 Time Crew Notified 6:30 AM Time Crew Arrived 7:50 AM Supervisor George Cardona

Name Tina Property Owner or Reporter Phone Number (505) 908-4670

Reported Location: From Manhole MAP# J10090 MH# 0 To Manhole MAP# J10191 MH# 1 Line Type: RCP Line Dia: 48" Occupant Notified: Yes Intersecting Street: 6100 ILiff St & 64th Hanover Street Type: Rd Quad: NW

40 Sewer Backup Comments: con't. on back

42 AS - Manhole Overflow Time of SSO 5:54 AM 07/10/2022 Time SSO Stopped 12:00 AM 07/12/2022 Duration of SSO 30 hrs. 06 mins. Amount Spilled (estimated) 6.74 million gallons Amount Removed (estimated) 3 million gallons (In Progress)

ULTIMATE DISCHARGE LOCATION: Rio Grande, Street (Dirt), Street (Pavement), Yard, Other

ENVIRONMENTAL IMPACT: Observed Or Evidence of Env. Impact

\*Storm Drain Cleaning Documentation: Wash water applied and removed from Storm Drain. Address/Intersection of Inlet to the Storm Drain. Address/Intersection of Removal from Storm Drain. Amount Recovered (estimated) 3 million gallons from West Bluff pond

Additional Vector(s) Called Out: Unit #(s) 194702/144701 Operator(s) Raymond Garcia, Michael Leeds Reason for Second Vector or Other Information: Mitigate and Persist with Multiple overflows (10-42)

48 Property Damage - Risk Management List Damages: Multiple Locations: 6100 ILiff Rd. NW - Quality Inn West (Still evaluating La Quinta and Hampton), and 2560 Coors Blvd NW

Claim Adjusters Name: Joe Klaus Year of Home: Were Pictures Taken, Does Home Have Basement, Does Home Have Back Water Valve, Is Floor Elevation Below Upstream Manhole

Comments and / or Recommendations

1st Review Action To Be Taken: Clean Segments, Upstream Downstream, Televis The Line Date, Adjust PM Interval: Freq. In weeks, Seg. #, Activity #, Root Saw Date, Root Foam Date, Notify Pretreatment Date, No Further Action Date, Collection Sys. Eng., Date



# CORRECTIVE MAINTENANCE

CM# 276091  
 SR# 23088  
 WO# 2109416

FROM MANHOLE	FLOW DIRECTION	TO MANHOLE	Albuquerque Bernalillo County Water Utility Authority Field Division / Collection Section
MAP # <u>J10090</u> MH # <u>0</u> DEPTH RIM TO INVERT FEET _____ INCHES _____	←  →	MAP # <u>J10191</u> MH # <u>1</u> DEPTH RIM TO INVERT FEET _____ INCHES _____	DATE COMPLETED MTH <u>07</u> DAY <u>12</u> YEAR <u>2022</u>

TIME NOTIFIED 07/10/22 AM  PM  6:30  
 TIME ARRIVED 7:50 AM  PM   
 TIME COMPLETED 12:00 AM  PM  07/12/2022

BLOCK # 6100 STREET ILiff DESIGNATION Rd QUAD Nw

**REPORTED AS**

<input type="checkbox"/> 40 SEWER BACK-UP - NO DAMAGE	<input type="checkbox"/> 43 SEWER LEAK	<input type="checkbox"/> 48 PROPERTY BACK-UP / DAMAGE
<input type="checkbox"/> 41 SEWER TROUBLE	<input type="checkbox"/> 44 CAVE-IN	<input type="checkbox"/> 49 FOLLOW UP
<input checked="" type="checkbox"/> 42 SEWER OVERFLOWING	<input type="checkbox"/> 45 BROKEN MANHOLE COVER	<input type="checkbox"/> 52 SEWER ODOR
	<input type="checkbox"/> 46 MISSING MANHOLE COVER	<input type="checkbox"/> 62 LINESPOT
	<input type="checkbox"/> 47 LOOSE MH COVER	<input type="checkbox"/> 63 MH NOT TO GRADE

**PROBLEM FOUND**

<input type="checkbox"/> 40 SEWER BACK-UP - NO DAMAGE	<input type="checkbox"/> 44 CAVE-IN	<input type="checkbox"/> 49 FOLLOW-UP
<input type="checkbox"/> 41 SEWER TROUBLE	<input type="checkbox"/> 45 BROKEN MANHOLE COVER	<input type="checkbox"/> 52 SEWER ODOR
<input checked="" type="checkbox"/> 42 SEWER OVERFLOWING	<input type="checkbox"/> 46 MISSING MANHOLE COVER	<input type="checkbox"/> 62 LINESPOT
<input type="checkbox"/> 43 SEWER LEAK	<input type="checkbox"/> 47 LOOSE MANHOLE COVER	<input type="checkbox"/> 63 MH NOT TO GRADE
	<input type="checkbox"/> 48 PROPERTY BACK-UP/DAMAGE	<input checked="" type="checkbox"/> AS AUTHORITY SEWER
		<input type="checkbox"/> NAS NON-AUTHORITY SEWER

**CAUSED BY**

<input type="checkbox"/> CO CONSTRUCTION	<input type="checkbox"/> EQ EQUIP FAILURE	<input type="checkbox"/> RGS RAGS	<input type="checkbox"/> SGG SAND, GRIT OR GRAVEL
<input type="checkbox"/> CU CAUSE UNKNOWN	<input type="checkbox"/> GR GREASE	<input type="checkbox"/> RN RAINFALL	<input type="checkbox"/> BP BURP
<input type="checkbox"/> DB DEBRIS	<input checked="" type="checkbox"/> LF LINE FAILURE	<input type="checkbox"/> RK ROCKS	<input type="checkbox"/> V VANDALISM
	<input type="checkbox"/> RGR ROOTS / GREASE	<input type="checkbox"/> RT ROOTS	

**ACTION TAKEN**

<input checked="" type="checkbox"/> CC COMBINATION CLEANING	<input type="checkbox"/> CC CONTINUED	<input checked="" type="checkbox"/> CWW CAPTURED WASTEWATER
<input type="checkbox"/> CHUTE	<input checked="" type="checkbox"/> WEDGE	<input type="checkbox"/> DT DYE TEST
<input type="checkbox"/> CATCH SCREEN	<input type="checkbox"/> COMMANDER	<input type="checkbox"/> BR BERMED AREA TO CONT. SSO
<input type="checkbox"/> PIPE WOLF	<input type="checkbox"/> HYDROSURGE	<input type="checkbox"/> RCS REMOVED CONTAMINATED SOIL
<input type="checkbox"/> ULTIMATE CHISEL	<input type="checkbox"/> ROOT SAW	<input checked="" type="checkbox"/> RP REMOVED POOLED WASTEWATER
<input type="checkbox"/> TWISTER	<input type="checkbox"/> HTH TREATED W/CHLORINE	<input checked="" type="checkbox"/> RS REMOVED SOLIDS
<input type="checkbox"/> DREDGER	<input type="checkbox"/> IN INSPECT	<input type="checkbox"/> SI SETTLEMENT INVESTIGATED
<input type="checkbox"/> PRIMUS	<input type="checkbox"/> LS LINESPOT	<input type="checkbox"/> SM SMOKE TEST
<input type="checkbox"/> SUPER FLUSHER	<input type="checkbox"/> MC MH COVER REPLACED	<input checked="" type="checkbox"/> WD WASH DOWN AREA
<input type="checkbox"/> GRENADE	<input type="checkbox"/> MS MH COVER SECURED	<input type="checkbox"/> ENC REF. TO ENG./CONT.
<input type="checkbox"/> JPX SLED ASY	<input type="checkbox"/> PN PUBLIC NOTIFICATION	<input type="checkbox"/> ET EMPTY DEBRIS TANK
<input type="checkbox"/> JETSCAN	<input type="checkbox"/> PO PUMP OUT	<input type="checkbox"/> CT CUT INTRUDING TAP

OTHER \_\_\_\_\_

<b>PIPE LENGTH</b> DISTANCE FROM MANHOLE TO MANHOLE <u>915</u> FT	<b>PIPE BLOCKAGE</b> DISTANCE FROM DS MH TO BLOCKAGE <u>815</u> FT
--	---

**PIPE SIZE**

<input type="checkbox"/> 4 INCH	<input type="checkbox"/> 10 INCH	<input type="checkbox"/> 18 INCH	<input type="checkbox"/> 24 INCH	<input type="checkbox"/> 36 INCH	<input type="checkbox"/> 60 INCH
<input type="checkbox"/> 7 INCH	<input type="checkbox"/> 12 INCH	<input type="checkbox"/> 20 INCH	<input type="checkbox"/> 27 INCH	<input type="checkbox"/> 42 INCH	<input type="checkbox"/> 66 INCH
<input type="checkbox"/> 8 INCH	<input type="checkbox"/> 15 INCH	<input type="checkbox"/> 21 INCH	<input type="checkbox"/> 30 INCH	<input checked="" type="checkbox"/> 48 INCH	<input type="checkbox"/> 72 INCH
	<input type="checkbox"/> 16 INCH	<input type="checkbox"/> 22 INCH	<input type="checkbox"/> 33 INCH	<input type="checkbox"/> 54 INCH	<input type="checkbox"/> 78 INCH

**PIPE TYPE**

<input type="checkbox"/> CIP CAST IRON PIPE	<input type="checkbox"/> PE POLYETHYLENE (SLIPLINE)	<input type="checkbox"/> VCP VITRIFIED CLAY
<input type="checkbox"/> CPN STANDARD CONCRETE	<input type="checkbox"/> PVC POLYVINYL CHLORIDE	
<input type="checkbox"/> DIP DUCTILE IRON PIPE	<input checked="" type="checkbox"/> RCP REINFORCED CONCRETE	

VEHICLE NO. 1087750 RADIO # 226 EMPLOYEE ID #     

REMARKS Line Collapse Tot, TLC Contractor  MORE ON BACK


OPERATOR'S SIGNATURE Christopher Padeco SUPERVISOR'S SIGNATURE Boyd Carter





# Memo

**To:** Danielle Shurn  
Compliance Division Manager

**From:** Mark S. Holstad, PE   
Field Division Collection Section Manager / Chief Engineer

**Date:** July 15, 2022

**Re:** SSO – July 10-11, 2022 – 64<sup>th</sup>-I40

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## Overview

The sanitary sewer overflow (SSO) that started on July 10, 2022, was caused by a structural collapse of the 48-inch pipe between manholes J10-090 (upstream) and J10-191 (downstream). Due to the topography and the disrupted flow, spills occurred over a large area about 3 miles between the southernmost (downstream) and northernmost (upstream) spills. This was a 6.7 million gallon SSO where 3.7 million gallons were discharged to the river and the Albuquerque Bernalillo County Water Utility Authority (Water Authority) will diligently take steps to prevent it from recurring.

The emergency response was rapid because the teams had practiced the plan, on call contractors were available for bypass support and partner agency resources were utilized immediately. The cooperation between the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and the Water Authority resulted in the reduction of 3 million gallons (MG) of the spill to the Rio Grande because it was captured in AMAFCA's water quality pond. The Water Authority was able to immediately respond and eliminate overflows approximately 31 hours after the spill was first reported. This response consumed all pump and hose capacity in the Albuquerque metropolitan area. The Water Authority completed the immediate notifications as required in the NPDES permit for category 1 spills.

## Collapse and Resulting SSO Hydraulics and Locations

See attached Attachment A-Sewer Collapse and Spill Location Map. Segment J10-191 to J10-090 collapsed on July 10, 2022. An SSO occurs when flow is sufficiently restricted that the detained flow volume exceeds the upstream volume available in pipes and manholes below the lowest manhole rim or plumbing fixture. The SSO was first reported at 5:54 p.m. Sunday, July 10, 2022 and was caused by the collapse. The collapse occurred on an interceptor with significant flow that could not be relieved by a single spill from a single collapse point or even several manholes. Based on reports from the contractor operating by-pass pumping for a major downstream rehab project, we believe that all flow in the interceptor was blocked and none continued downstream. The upstream pipe therefore continued to fill and more, and more, manholes spilled as the water level rose as the cumulative release from multiple manholes was inadequate in comparison to the upstream flow.

The interceptor is flat (0.0006 ft/ ft) in accordance with accepted criteria at the time of original design and construction. As a result, and because of a lesser rim to invert dimension, the farthest upstream spill was approximately 3 miles upstream of the most downstream spill.



Many spill locations occurred in this SSO resulting from a single collapse. While nearly overwhelmed, the Water Authority Dispatch (505-842-WATR) handled the calls, assigned Service Requests documented in Maximo, and Water Authority crews responded.

The spills from this SSO primarily, but not exclusively, flowed to the City of Albuquerque drainage system. Attachment A identifies five spill areas based on where the flow routed within the drainage systems. Four of the five flowed to City storm drainage systems. Table 2 - Spill Locations and Volumes provides estimated volumes in each of the areas. During preparation of this report, it was identified that two relatively small spills occurred that did not flow to the West Bluff Pond or to the discharge outlets to the Rio Grande at I40. The estimated 100-gallon spill at Area 5 is believed to have dried at the pervious area around the manhole and had no downstream impact. The estimated 54,000-gallon spill drained through the City storm pipes that route to Sequoia and then discharges to Rio Grande. I spoke with the City (David Harrison, Engineering Division Manager) and confirmed the discharge point. I inspected the discharge at 7 p.m. on July 13 and observed no indication of remaining spill or solids.

### **Cause of Collapse**

The Water Authority has initiated the rehabilitation of the immediately downstream portion of the same interceptor that collapsed. By-pass pumping commenced on July 7 for this downstream project. The Water Authority believes that this by-pass pumping surcharged the upstream interceptor that collapsed. The interceptor apparently was corroded, and surcharging saturated the soil above the interceptor. The soil lost cohesion and collapsed into the pipe, blocking all flow.

The Water Authority had instituted by-pass provisions to prevent surcharging in unlined pipes upstream of I40. However, the pipe that collapsed was thought to have been previously rehabilitated and was not included in these provisions. As discussed below, this is a gap and will be addressed.

### **Timeline – Fundamental Events and Actions**

See Table 1 - Response Timeline.

**Table 1 Response Timeline**

<b>Date</b>	<b>Time</b>	<b>Event</b>
7/10/2022	Unknown	Collapse of 48-inch Interceptor 815 feet from MH J10-090 (see map Area 1)
	5:54 PM	Spill Reported to Dispatch at 6100 Illif Rd. NW (see map Area 2)
	7:50 PM	Water Authority Crew arrives at the site (see map Area 1)
	8:00 PM	Emergency On-Call Contractor (TLC) mobilizes at the site
	8:00 PM	Spill Reported to Dispatch at Estancia and Juniper (see map Area 3)
	10:24 PM	Water Authority coordinates with AMAFCA to utilize West Bluff Pond to prevent as much sewage as possible from entering the Rio Grande River
7/11/2022	12:45 AM	Water Authority alerts Pueblo of Isleta and MRGCD that sewage will be discharged to the Rio Grande River (see Category One Notification Form)
	12:45 AM	Emergency On-Call Contractor (TLC) starts first 6" bypass pump to send sewage to the West Bluff Pond
	2:00 AM	Emergency On-Call Contractor (TLC) adds second 6" pump
	4:00 AM	Emergency On-Call Contractors (TLC/RMCI) add two additional 6" pumps
	6:00 AM	Spill Reported to Dispatch near Corona and Redlands (Area 4)
	7:00 AM	Spill Reported to Dispatch near Dellyne and Arabian (Area 5)
	9:00 AM	Emergency On-Call Contractors (TLC/RMCI) install first 12" pump
	11:00 AM	Emergency On-Call Contractors (TLC/RMCI) install second 12" pump
	12:00 PM	Emergency On-Call Contractor (Southwest Sewer) onsite to assist with pooled wastewater clean-up at collapse site
	3:58 PM	Water Authority completes 24-Hour SSO Notification to NMED by phone (see SSO Notification Form)
4:00 PM	Water Authority completes 24-Hour SSO Notification to EPA/Pueblo of Isleta by email (see SSO Notification Form)	
7/12/2022	12:00 AM	Final Spill Stops at Area 2 (Illif Rd. and Estancia)
7/13/2022	5:00 AM	Water Authority Crews begin to pump out sewage from the West Bluff pond to the sewer system

**Centralized Engineering / Construction Response**

Dispatch receives and documents customer reports of SSOs. Because this SSO occurred on a weekend, the Standby Supervisor was called and responded. The Standby Supervisor quickly recognized the magnitude of the SSO and called for Centralized Engineering support. The Centralized Engineering Chief Engineer responded. It was quickly identified that the interceptor had collapsed, and by-pass pumping was the required remediation.

See Attachment C - Bypass Pumping Vicinity Map which identifies the collapse location, the interim by-pass pumping installed to this point and long term by-pass that will allow rehabilitation of the pipe that collapsed.

TLC is the current On-Call contractor tasked with responding to interceptor emergencies. TLC responded and installed its pumping capacity. The Chief Engineer identified that this pumping rate was inadequate and immediately, and unprecedentedly, called in a second On-Call contractor. RMCI brought additional pumps, which, in sum, pump more than the largest interceptor flow in the Water Authority's system.

Once installed, the net sum of the pumps was greater than the upstream flow and pulled down the stored volume upstream of the blockage. Because the stored volume was higher vertically than the blockage, spills continued but sequentially dropped and stopped in elevation as this volume was removed and pumped downstream. This is further discussed below.

Attachment B- SWRP Hourly Flow Data Comparison and Bypass Pumping Capacity Table which provides further insights.

### West Bluff Pond Temporary Storage

At 10:24 p.m., July 10, Jerry Lovato, AMAFCA Executive Engineer was contacted. We met on-site and determined to utilize the West Bluff Pond to hold the maximum spill volume so that it could later be pumped back into the collection system. AMAFCA staff mobilized and by 2:45 a.m. July 11 had stopped flow from the Pond. See below for further discussion.

### Spill Volume

The 24-hour SSO Notification is Permit required and provides an initial estimate of the volume spilled. Through additional analysis, it has been determined that this initial estimate was high and therefore a revised estimate is provided.

The Water Authority maintains accurate flow monitoring at the Southside Water Reclamation Plant (SWRP). An analysis determined that the total spill was 6.74 MG. See Attachment B - SWRP Hourly Flow Data Comparison and Bypass Pumping Capacity Table. Of this, approximately 3 MG is estimated to be held at the West Bluff Pond. The Water Authority estimate is therefore a total 6.7 MG spill with 3.7 MG reaching the Rio Grande. Table 2 provides approximate spill volumes and location in the 3-mile radius.

**Table 2 – Spill Volumes and Locations**

				Estimated Time Spilling	
Map Areas	Spill Location Description	Ultimate Discharge Location	Estimated Volume (gallons)	Estimated Start Time (Spill reported)	Estimated End Time
1	64th and Hanover	West Bluff Pond Removed	5,200,000	6:00pm Sunday	12:00am Tuesday
2	Iliff and Estancia	River	1,000,000	7:30pm Sunday	12:00am Tuesday
3	Estancia and Juniper/ Ouray and Corona	West Bluff Pond and River	490,000	8:00pm Sunday	4:00pm Monday
4	Redlands and Corona	River	54,000	6:00am Monday	1:30pm Monday
5	Dellyne and Arabian	Dirt Surface	100	7:00am Monday	11:00am Monday
<b>Total</b>			6,744,100		
<b>Estimated Sewage Retained in Pond</b>			3,000,000		
<b>Estimated Sewage Discharge to the Rio Grande</b>			3,744,100		

### Cleanup

The Water Authority followed its Overflow Emergency Response Plan (OERP) for sanitary sewer overflows in the collection system. The OERP is posted to the Water Authority website at

[https://www.abcwua.org/wp-content/uploads/Sewer\\_system/OERP\\_12012019.pdf](https://www.abcwua.org/wp-content/uploads/Sewer_system/OERP_12012019.pdf). Once the spills ceased at a particular location, Water Authority Vector crews washed down the area and removed the wash water and solids. The Water Authority street sweeper was utilized for final cleanup at some street and parking lot locations. HTH, dry chlorine, was not utilized in response to this SSO to prevent impacts to aquatic life in the Rio Grande.

### **Public Notifications and Site Inspection**

Immediate and 24 hour notifications were completed as required in the permit on July 11, 2022. River samples for E.coli were collected at four stream locations and two press releases (attachment D) were put out. On Tuesday July 12, the Water Authority issued a press release (attachment D) and Water Authority staff attended a coordination meeting with Pueblo of Isleta and Middle Rio Grande Conservancy District to discuss the emergency response and current status. It was agreed that river samples would be collected at the 4 locations each day and the results would be shared so that E. coli data can be available to show the status of the river until it returns to baseline conditions. In the late afternoon, EPA contacted the Water Authority and notified them of a site inspection the next morning at 9:30AM. On July 13, 2022, the EPA and NMED inspected the site of the collapse, the outfall to the river and the storage pond. Other entities in attendance were AMAFCA and the Pueblo of Isleta. River sampling results have been emailed out to all interested parties each day. Downstream notification was made to Elephant Butte Lake Park.

### **Notice of Discharge Removal and Corrective Action Response**

In response to New Mexico Water Quality Control Commission Regulations (20.6.2.1203 NMAC), the Water Authority is submitting the attached information to constitute a Notice of Discharge Removal and Corrective Action Response Report for your notification and approval.

### **Conclusion and Corrective Action Responses**

Approximately 3 MG of sewage was spilled to and contained by the West Bluff Pond. This Pond is a water quality feature owned and managed by AMAFCA. AMAFCA temporarily closed off the Pond outlet, retaining this sewage and preventing its release to the Rio Grande. AMAFCA also closed off the Pond to through-flow of storm water, however, during run-off events the pond does “float” with the drainage system and will slowly fill to an equilibrium elevation. Two storms have occurred since the sewage was trapped and slow flow into the Pond was observed during each storm event.

The Water Authority commenced pumping from the Pond approximately 5 a.m. on Wednesday, July 13. Pumping ended Thursday afternoon due to surcharging in the discharge manhole. Full removal of the remaining sewage is anticipated next week when system surcharging is resolved. Due to the volume removed to date, the remaining water is diluted. Once the Pond is pumped down, debris will be removed and disposed.

The Water Authority followed its Overflow Emergency Response Plan (OERP) for sanitary sewer overflows in the collection system. The OERP is posted to the Water Authority website at [https://www.abcwua.org/wp-content/uploads/Sewer\\_system/OERP\\_12012019.pdf](https://www.abcwua.org/wp-content/uploads/Sewer_system/OERP_12012019.pdf). Page 3 addresses specific issues related to spills to pervious areas in which, remediation consists removing the wastewater, controlling access, and allowing to dry which completes remediation. This is in addition to steps noted elsewhere in the OERP, e.g., remove solids as noted on page 2.

Based on the analysis and remedial steps taken, it is concluded that temporary ponding of sewage at West Bluff Pond will have little effect to the public health or to the ground water or environment in the area.

### **Identified Gap**

A gap has been identified. The Water Authority's GIS in at least one instance, identified a critical pipe asset as being a non-corrosive material rather than the proper corrosive material. The Water Authority will respond as follows:

1. In future rehab projects, the Water Authority will address future uncertainties in actual, vs GIS, identifications.
2. The Water Authority will CCTV all lines originally constructed as RCP and identified in GIS as rehabilitated.

## **Attachment A – Sewer Collapse and Spill Location Map**





# Sewer Collapse & Spill Location Map

Note: This graphically shows major spill locations and those that were reported to dispatch, resulting in a service request. Within Area 3, additional manholes did spill small amounts.

## Legend

- Interceptors
- Sewer Collapse
- MHS Overflowing
- Storm Drainage
- AMAFCA Drainage
- AMAFCA Pond

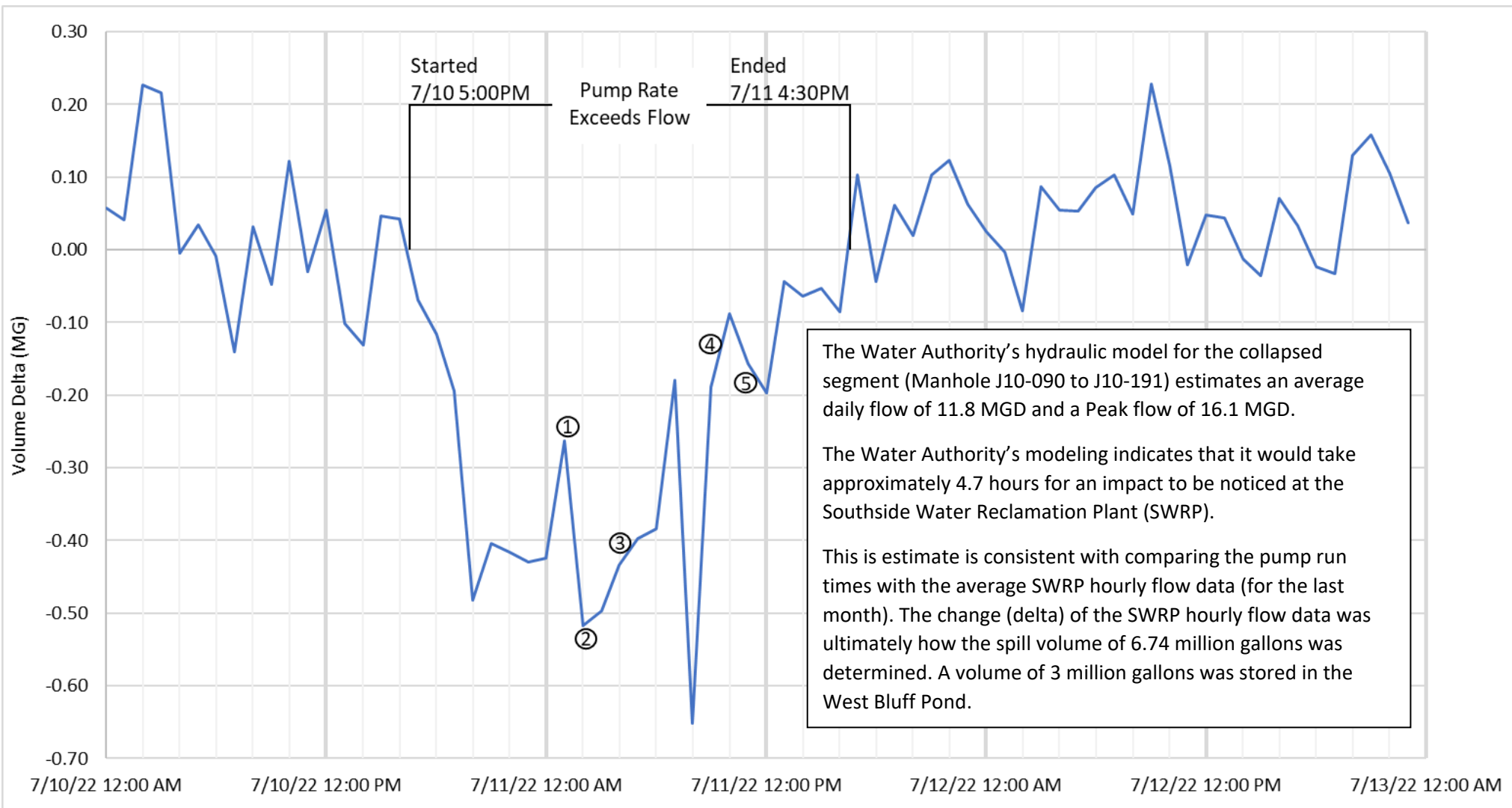
0 1,000  
Feet





**Attachment B – SWRP Hourly Flow Data Comparison and Bypass Pumping Capacity Table**





<u>Event (as identified on graph)</u>	<u>Interim Bypass Pumps</u>	<u>Time on 07/11/2021</u>	<u>Estimated Pump Capacity (MGD)</u>
1	(1) 6" Pump Running	1:00 AM	1.5
2	(2) 6" Pumps Running	2:00 AM	3
3	(4) 6" Pumps Running	4:00 AM	6
4	(1) 12" Pump and (4) 6" Pumps Running	9:00 AM	17.5
5	(2) 12" Pumps and (4) 6" Pumps Running	11:00 AM	29.0

\*Total Estimated Pumping Capacity

## **Attachment C – Bypass Pumping Vicinity Map**



## **Attachment D – Press Releases**

**From:** "Morris, David R." <[dmorris@abcwua.org](mailto:dmorris@abcwua.org)>

**Date:** July 11, 2022 at 7:43:43 AM MDT

**Subject:** **UPDATE—EMERGENCY REQUEST TO REDUCE WATER USE ON WEST SIDE**

7:35 AM—Water Authority personnel and contractors continue to work on repairs to the collapsed sewer line near Coors and 64th. We are continuing to ask Westside residents to **LIMIT WATER USE AND FLUSHING THIS MORNING** in order to reduce flows to the broken pipe.

The 48" pipe collapsed last night, causing extensive overflows as well as backups into homes and businesses.

David Morris  
Water Authority Public Affairs  
505-264-5691





# Albuquerque Bernalillo County Water Utility Authority

## **NEWS RELEASE**

### **UPDATE: Major Sewer Line Collapse on West Side**

*Residents asked to limit water use during repairs*

**CONTACT: David Morris, 505-264-5691**

**JULY 11, 2022** – Water Authority personnel and contractors have been working since Sunday night to address a collapsed 48-inch sewer line on 64<sup>th</sup> Street west of Coors Boulevard near Hanover.

Workers are setting up a bypass pumping system to manage sewer flows through the line, which serves the majority of Albuquerque’s West Side. Meanwhile, the Water Authority is asking residents west of the river to limit their water use for the next few days in order to facilitate repairs and prevent backups into homes and businesses. Damage to property so far has been limited to two commercial properties and one residence, according to the utility’s Risk Management department.

The utility hopes to have the bypass system completely operational by this evening to handle West Side flows while repairs are underway to the collapsed line. Permanent repairs may take several weeks.

Because overflows from the collapse have entered the community’s storm drains and migrated into the Rio Grande south of Interstate 40, the Water Authority has notified the New Mexico Environment Department, the Environmental Protection Agency, Isleta Pueblo, the Middle Rio Grande Conservancy District (MRGCD) and Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and is coordinating necessary steps to mitigate the environmental impact of the spill. Residents are warned not to swim in the river downstream of I-40 and to avoid any sewage standing in streets or gutters.

The suspected cause of the collapse is the age of the sewer pipe, which according to utility records was installed in 1963 and has been identified as high priority for replacement. Other sections of the same line are already undergoing rehabilitation but the affected area was not under construction at the time of the collapse.

###



# Albuquerque Bernalillo County Water Utility Authority

## **NEWS RELEASE**

### **Day 3 Update on West Side Sewer Collapse**

*Residents asked to limit water use through end of week*

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**CONTACT: David Morris, 505-264-5691**

**JULY 12, 2022**—A temporary bypass pumping system is in place and successfully diverting flows around a collapsed sewer pipe that caused backups and overflows on Albuquerque's West Side on Sunday and Monday of this week. Construction of a permanent bypass pump system to be used while the damaged pipeline is under repair will be ongoing through the end of the week.

Water Authority engineers are asking that West Side residents limit water use (washing machines, dishwashers) for the rest of the week. This will allow sewage that built up in upstream pipes over the past two days to make its way through the bypass system, which is handling sewer flows from most of Albuquerque's West Side.

Cleanup of spilled sewage on streets and sidewalks continues today. Overflows of sewage into the Rio Grande via the storm drain system have ceased, and the Water Authority is following EPA and New Mexico Environment Department requirements to determine the extent of the permit violations caused by the spill.

The 48-inch sewer pipe, located on 64<sup>th</sup> Street near Hanover and Coors Boulevard, was installed in 1963. Other sections of the same line are undergoing rehabilitation but the affected area was not under construction at the time of the collapse.

# # #



**Attachment E: Photographs from Monday and Tuesday July 11 & 12, 2022**

1. Storm outfall and sample collection downstream





## 2. Street flow and storm pond





### 3. Sink hole



### 4. Tuesday July 12 Sample Collection





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6

1201 ELM STREET, SUITE 500  
DALLAS, TEXAS 75270-2102

November 1, 2022

TRANSMITTED VIA EMAIL

Ms. Danielle Shurn  
Compliance Division Manager  
Albuquerque-Bernalillo County Water Utility Authority  
4201 2<sup>nd</sup> Street SW  
Albuquerque, NM 87105  
dshurn@abcwua.org

Re: Administrative Order; Docket Number CWA-06-2023-1703  
NPDES Permit No. NM0022250

Dear Ms. Shurn:

Enclosed is an Administrative Order (AO) issued by the United States Environmental Protection Agency, Region 6 (EPA) concerning the Albuquerque-Bernalillo County Water Utility Authority's (ABCWUA) wastewater treatment plant and collection system. This Order requires ABCWUA to comply with the provisions set forth in the attached Order. EPA requests that you immediately confirm receipt of this e-mail and the attached Order by a response email to [loston.anthony@epa.gov](mailto:loston.anthony@epa.gov). This Order is effective immediately upon receipt of this e-mail.

This AO does not assess a monetary penalty; however, it does require compliance with applicable federal regulations. The first compliance deadline is within thirty days of receipt of the AO. The EPA is committed to ensuring compliance with the requirements of the National Pollutant Discharge Elimination System (NPDES) program, and my staff will assist you in any way possible. Please reference Docket Number CWA-06-2023-1703 and NPDES Permit No. NM0022250 on your response.

If you have any questions, please contact Anthony M. Loston, of my staff, at (214) 665-3109 or [loston.anthony@epa.gov](mailto:loston.anthony@epa.gov).

Sincerely,

A handwritten signature in blue ink that reads "Cheryl T. Seager".

Digitally signed by  
CHERYL SEAGER  
Date: 2022.11.01  
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Cheryl T. Seager, Director  
Enforcement and  
Compliance Assurance Division

Enclosure(s)

Page 2

cc: Ms. Shelly Lemon, Bureau Chief  
New Mexico Environment Department  
Surface Water Quality Bureau  
[shelly.lemon@state.nm.us](mailto:shelly.lemon@state.nm.us)

Ms. Susan Lucas Kamat  
New Mexico Environment Department  
Surface Water Quality Bureau  
[susan.lucaskamat@state.nm.us](mailto:susan.lucaskamat@state.nm.us)



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 • 1201 Elm St. Suite 500 • Dallas, TX 75270-2102

### FINDINGS OF VIOLATION AND COMPLIANCE ORDER

Docket Number: CWA-06-2023-1703; NPDES Permit Number: NM0022250

#### STATUTORY AUTHORITY

The following findings are made, and Order issued, under the authority vested in the Administrator of the United States Environmental Protection Agency (EPA), Section 309(a) of the Clean Water Act (the Act), 33 U.S.C. § 1319(a). The Administrator of EPA delegated the authority to issue this Order to the Regional Administrator of EPA Region 6, who delegated this authority to the Director of the Enforcement and Compliance Assurance Division.

#### FINDINGS

1. Albuquerque-Bernalillo County Water Utility Authority (Respondent) is a “person,” as that term is defined at Section 502(5) of the Act, 33 U.S.C. § 1362(5), and 40 C.F.R. § 122.2.
2. At all times relevant to this Order (all relevant times), Respondent owned or operated the Southside Reclamation Plant located at 4201 Second Street in the City of Albuquerque, Bernalillo County, New Mexico (facility), and was, therefore, an “owner or operator” within the meaning of 40 C.F.R. § 122.2.
3. At all relevant times, the facility acted as a “point source” of a “discharge” of “pollutants” with its wastewater discharge to the receiving water named the Rio Grande in Segment 20.6.4.105 of the Rio Grande Basin, which is a “water of the United States,” within the meaning of Section 502 of the Act, 33 U.S.C. § 1362, and 40 C.F.R. § 122.2.
4. Because Respondent owned or operated a facility that acted as a point source of discharges of pollutants to waters of the United States, Respondent and the facility were subject to the Act and the National Pollutant Discharge Elimination System (NPDES) program.
5. Under Section 301 of the Act, 33 U.S.C. § 1311, it is unlawful for any person to discharge any pollutant from a point source to waters of the United States, except with the authorization of, and in compliance with, an NPDES permit issued pursuant to Section 402 of the Act, 33 U.S.C. § 1342.
6. Section 402(a) of the Act, 33 U.S.C. § 1342(a), provides that the Administrator of EPA may issue permits under the NPDES program for the discharge of pollutants from point sources to waters of the United States. Any such discharge is subject to the specific terms and conditions prescribed in the applicable permit.
7. Respondent applied for and was issued NPDES Permit No. NM0022250 (permit) under Section 402 of the Act, 33 U.S.C. § 1342, which became effective on December 1, 2019, and expires on November 30, 2024. At all relevant times, Respondent was authorized to discharge pollutants from the facility to waters of the United States only in compliance with the specific terms and conditions of the permit.
8. Part I.A of the permit (Monitoring and Reporting Requirements) requires Respondent to sample and test its effluent and monitor its compliance with permit conditions according to specific procedures, in order to determine the facility’s compliance or noncompliance with the permit and applicable regulations. The permit also requires Respondent to file with EPA certified Discharge Monitoring Reports (DMRs) of the results of monitoring, and Noncompliance Reports when appropriate.
9. The permit contains “Effluent Limitations and Monitoring Requirements” that place certain limitations on the quality and quantity of effluent discharged by Respondent. The relevant discharge limitations are specified in Attachment A, which is incorporated herein by reference.
10. Certified DMRs filed by Respondent with EPA in compliance with the permit show discharges of pollutants from the facility that exceed the permitted effluent limitations established in the permit, as specified in Attachment B, which is incorporated herein by reference.
11. Part III.B.3 of the permit requires Respondent to at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by Respondent as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of the permit.
12. On July 15, 2022, Respondent submitted a condition report notifying EPA of a sanitary sewer overflow (SSO) that occurred on July 10, 2022, at 6100 Iliff Road NW, Albuquerque, NM. This SSO was caused by a collapsed 48-inch sewer line which resulted in the discharge of 6.74 million gallons of untreated wastewater. Three million gallons of the spill were routed to the West Bluff Pond while 3.7 million gallons reached the Rio Grande. This is a violation of Part III.B.3 of the permit.



13. Part III.B.2 requires the Respondent to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the permit which has a reasonable likelihood of adversely affecting human health and the environment.

14. On July 13, 2022, an EPA inspector conducted a SSO inspection at the facility. During the inspection, Respondent's records indicated that the 48-inch sewer line that collapsed on July 11, 2022, had been previously upgraded with a fiberglass reinforced liner. However, field observations revealed that the collapsed sewer line did not have a fiberglass reinforced liner. This is a violation of Part III.B.2 of the permit.

15. Part I.D of the permit requires Respondent to immediately contact representatives from the Pueblo of Isleta following overflow events from broken lines or spills that can and will discharge to the Rio Grande and/or reach the Pueblo of Isleta through a drain, culvert, canal, or other feature.

16. Pursuant to the July 15, 2022 condition report submitted to EPA, the Respondent reported the SSO at 6100 Iliff Road NW, Albuquerque, NM to dispatch at 5:54 PM on July 10, 2022. However, Respondent did not notify representatives from the Pueblo of Isleta until 12:45 AM on July 11, 2022. This is a violation of Part I.D of the permit.

17. Each instance in which Respondent discharged pollutants to waters of the United States in amounts exceeding the effluent limitations contained in the permit was a violation of the permit and Section 301 of the Act, 33 U.S.C. § 1311.

#### SECTION 309(a)(3) COMPLIANCE ORDER

Based on the foregoing Findings and pursuant to the authority of Section 309(a)(3) of the Act, 33 U.S.C. § 1319(a)(3), EPA hereby orders Respondent to take the following action:

A. Take such measures as are necessary to comply with all permit conditions, including "Effluent Limitations and Monitoring and Reporting Requirements," no later than thirty (30) days from the effective date of the Order.

B. Within thirty (30) days of the effective date of this Order, Respondent shall submit a written report detailing the specific actions taken to correct the violation cited in Paragraph 12, 14, 16 and 17, and an explanation as to why such actions are anticipated to be enough to prevent recurrence of this or similar violations. This report shall include: 1) any costs to repair or replace the collapsed 48-inch line; 2) any recurring costs Respondent anticipates as a result of the collapse and subsequent discharge; 3) a table of sanitary sewer overflows, including cause, location, duration, and volume; that have occurred from

10/1/2019 to 10/1/2022. This list shall specify whether each overflow reached waters of the US.

C. Within thirty (30) days of the effective date of this Order, Respondent shall provide written certification to EPA Region 6 signed by an authorized official [as defined in 40 C.F.R. § 122.22(a)(3)] that the violations cited herein have been corrected and the facility is in compliance with the requirements of the permit.

D. In the event the Respondent believes complete correction of the violations cited herein is not possible within thirty (30) days of the effective date of this Order, Respondent shall, within thirty (30) days of the effective date of this Order, submit a comprehensive written plan for the elimination of the cited violations within the shortest possible time. Such plan shall describe in detail the specific corrective actions to be taken and why such actions are sufficient to correct the violations. The plan shall include a detailed schedule for the elimination of the violations within the shortest possible time, as well as measures to prevent these or similar violations from recurring.

E. Any approved compliance schedule will be incorporated and re-issued in a future administrative order.

F. Any information or correspondence submitted by Respondent to EPA under this Order shall be addressed to the following:

Mr. Anthony Loston  
Water Enforcement Branch (ECD-WM)  
U.S. EPA, Region 6  
loston.anthony@epa.gov

#### GENERAL PROVISIONS

Respondent may seek federal judicial review of the Order pursuant to Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706.

Issuance of this Section 309(a)(3) Compliance Order shall not be deemed an election by EPA to waive any administrative or judicial, civil or criminal action to seek penalties, fines, or any other relief appropriate under the Act for the violations cited herein, or other violations that become known to EPA. EPA reserves the right to seek any remedy available under the law that it deems appropriate.

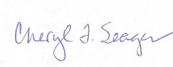
Failure to comply with this Section 309(a)(3) Compliance Order or the Act may result in further administrative action, or a civil judicial action initiated by the United States Department of Justice.

This Order does not constitute a waiver or modification of the terms or conditions of Respondent's NPDES permit, which remain in full force and effect. Compliance with the terms and conditions of this Order does not relieve Respondent of its obligation to comply with any applicable federal, state, or local law or regulation.

The effective date of this Order is the date it is received by Respondent.

November 1, 2022

Date



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Cheryl T. Seager, Director  
Enforcement and  
Compliance Assurance Division



November 30, 2022

**Chair**

Klarissa J. Peña  
City of Albuquerque  
Councilor, District 3

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Village of Los Ranchos  
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*Website*  
[www.abcwua.org](http://www.abcwua.org)

Anthony Loston  
Arkansas State Enforcement Coordinator  
EPA Region VI  
1201 Elm Street Suite 500  
Dallas, TX 75270-2102  
[Loston.anthony@epa.gov](mailto:Loston.anthony@epa.gov)

**RE: ABCWUA 30-day Response to Administrative Order CWA -06-2023-1703**

This report by the Albuquerque Bernalillo County Water Utility Authority (Water Authority) is a response to the EPA Administrative Order CWA-06-2023-1703 issued for NPDES permit No. NM0022250. Specifically, the attached response includes the following required sections:

1. Actions taken to correct the violations cited,
2. Costs to replace the collapsed 48-inch line,
3. Recurring costs because of the collapse and discharge,
4. A comprehensive plan to eliminate similar violations from occurring in the shortest possible time, and
5. A table of all sanitary sewer overflows from October 1 2019-2022.

Please contact me at 505-803-1970 or [dshuryn@abcwua.org](mailto:dshuryn@abcwua.org) with any questions or concerns on the response.

Respectfully,



Danielle Shuryn  
Compliance Division Manager

## 1. Actions Taken to Correct Violations:

### Permit Section I.A Discharge Monitoring and Reporting:

The Water Authority has taken both operational and engineering actions to eliminate water quality standards exceedances in discharges during this permit period. The water quality standards exceedances that the Water Authority experiences in the discharge are never repeated during consecutive sampling events. The discharge returns to meeting compliance expectations very soon after an exceedance is identified, always by the next day, which made supplemental data collection and investigation of any causes of the repeat of mercury and E. coli exceedances over time a critical component to identifying a solution.

Operationally, in September 2020, the Water Authority's NPDES Program began extensive mercury sampling in the collection system, throughout the plant and at the UV disinfection facility upstream of the outfall to determine the possible causes of the repeat mercury exceedances. Sampling revealed that mercury was accumulating in biofilm growth build up on channel and pipe walls. The periodic sloughing of biomass from the channel walls and pipes was identified as potentially contributing to the exceedances.

As a result of the data collection, in December of 2020, the Southside Wastewater Reclamation Plant (SWRP) Operations team worked to optimize this process with bi-weekly cleanings of the UV disinfection channels to remove biofilm from the channel walls and flooring. Since implementation of this cleaning program, annual totals for mercury daily exceedances were reduced from 6 in 2020 to 3 in 2021 and 2 in 2022.

In 2021, when the mercury and E. coli exceedances were not eliminated with the operational changes, the SWRP Management hired an engineering team to assess the UV disinfection process and provide recommendations in a *SWRP UV Disinfection Computational Fluid Dynamics Modeling Study*. The conclusions of the study were implemented in 2022 with the construction of UV channel baffling to improve flow uniformity through the UV disinfection equipment and the implementation of other listed recommendations to improve disinfection. This project is expected to be complete in December 2022. The UV disinfection construction project to improve channel hydraulics also incorporates the use of a diver to remove biofilm from submerged channels and junction boxes at the UV disinfection facility. The project will construct storage racks for the temporary removal of offline UV disinfection equipment to allow for more complete cleaning of the UV disinfection channels by SWRP staff. In January 2023, the UV disinfection process improvements will be complete, and data will be collected on the effectiveness of those changes in reducing concentrations of E. coli and mercury to eliminate discharge water quality standard exceedances.

Finally, as a source control measure, the Water Authority completed monitoring and weighted flow analyses to determine a systemwide Mercury Minimization Plan. The Mercury Minimization Plan will be finalized in November 2022, which outlines Pretreatment Program actions to minimize point discharges of mercury into the collection system. Reduced loadings of mercury to SWRP will result in lower outfall concentrations to routinely meet requirements.

**Permit Section III.B.3 Operate and maintain to minimize upsets and discharges:**

The Westside Interceptor sanitary sewer (SAS) line that collapsed caused a spill during the rehabilitation construction of an adjacent segment. Upon discovering the concrete pipe in the collapse area was not lined as was expected from GIS data, immediate actions were taken to assess the project area for any other high potential for a secondary collapse. Similarly, there can be upstream damage when sewers are surcharged in a collapse, when the supply of sewage to be carried is greater than the capacity of the pipes. To eliminate secondary collapses, the Water Authority inspected daily for surcharge damage and upstream collapse potential until the bypass pumping was effective and the surcharge removed. As described in the 5-day report on this spill, the bypass and clean ups were implemented as fast as possible to minimize impacts. Further action has been taken to plan the rehabilitation of the upstream segments of unlined 48-inch westside interceptor to eliminate the potential for collapse and accidental discharge.

**Permit Section III.B.2 Take all reasonable steps to prevent discharge or disposal in violation of the permit:**

The primary reason why the operational and engineering steps to prevent collapse and accidental discharge failed was the inaccurate information in the GIS system. The interceptor SAS line segment that collapsed was identified as already rehabilitated, but in the field when observed after the collapse, it was not lined as expected. The GIS information labeling the segment as lined was reviewed, and it did not have any back up documentation such as video showing current conditions or record drawings associated with those segments. Due to the pipe material listed in GIS not falling in a high-risk category, this line was not inspected in the most recent large diameter inspections.

The lack of back up documentation was identified as a significant gap in the GIS data, which required immediate correction. The Collections team worked to query all the GIS data to identify any segments that did not have the video or record drawings to verify the current condition and potential for collapse. The study revealed that 125 segments were identified as missing back up documentation to define the asset condition, which totals about 35,150 linear feet. A contractor has been hired to inspect and complete Closed Circuit Television Video (CCTV) on these segments by January 2023. Interceptor lines identified as vitrified clay pipes built before 1970 will also get CCTV inspection to confirm the pipe type; if it is confirmed as concrete, it will be moved up in the priority for planned rehabilitation.

Another critical follow up action to ensure compliance with NPDES permit conditions was the development of an *Overflow Contingency Plan for the Westside Interceptor*. This document lists immediate action steps to take if a collapse occurred on the 2.2-mile section of Westside Interceptor upstream of the 64<sup>th</sup>/Hanover collapse location and outlined key stakeholders along this reach that would require coordination for the use of storage ponds and other preventative steps in the event of a collapse. This document will continue to be important until the rehabilitation of this section of Westside Interceptor is completed.

**Permit Section I.D Immediately contact representatives from the Pueblo of Isleta following overflow events that will reach the Rio Grande:**

The Water Authority has interpreted the immediate contact requirement as calls are to be made as quickly as possible once it is determined that the sewer overflow can or has reached the river. It is also

expected that the Water Authority will coordinate with other agencies to mitigate the spill whenever possible to prevent discharge to the Rio Grande. In this spill event, it was unclear in the first few hours where the spill was draining and if it could reach the river. The Collections team immediately took steps to determine the drainage routes, possible ponding, and potential to retain the spill. After visiting the collapse site and coordinating with the Engineering spill response team, the drainage routes were still unclear, and the spill was not yet visibly reaching the river. As previously reported, the first call was made to the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) at 10:24 pm to utilize the storage pond. After an additional site visit, AMAFCA moved forward with field work to capture sewage at the storage pond. The Collections team compiled the required information and made the permit required phone call notifications after midnight. It was in this time period that Isleta Pueblo was also notified.

The Water Authority completed a practice sewer spill response on February 14, 2018, including the Pueblo of Isleta, Middle Rio Grande Conservancy District that manages irrigation distributions, and AMAFCA. If it is beneficial to improve immediate spill response expectations, another practice event can be scheduled to simulate an improved immediate response in a similar scenario. The Water Authority investigates each sanitary sewer overflow and has not previously had a spill this permit period that was confirmed to reach the river from a manhole in the collection system.

## **2. Cost summary to repair the collapsed 48-inch Westside Interceptor Piping**

The 48-inch Westside Interceptor SAS collapse that occurred near 64<sup>th</sup>/Hanover on July 10<sup>th</sup>, 2022, was repaired such that 3 full segments of unlined pipe (manhole to manhole rehabilitation) were lined with cured-in-place pipe (CIPP) liner in August 2022, and gravity sewer flow through these rehabilitated pipes was restored in September 2022. The emergency bypass pumping was removed, significant site restoration occurred such as fill, compaction, roadway restoration and odor station re-build in October and November 2022, and only a few minor site restoration activities will extend into December 2022, including the eyewash station and manhole liner touchup.

**Table 1: Cost Summary to Repair the Collapsed Interceptor**

<b>WO/PO</b>	<b>Pay App #</b>	<b>Invoice for Work Period</b>	<b>Invoice Total</b>	<b>Status</b>
C0000447	1	Jul-22	\$ 700,375.00	Paid
C0000447	2	Aug-22	\$ 1,077,500.00	Paid
C0000447	3	Sep-22	\$ 862,000.00	Paid
C0000447	4	Oct-22	\$ 592,625.00	Pending Force Account Review
		<b>SUBTOTAL</b>	<b>\$ 3,232,500.00</b>	
		<b>TOTAL</b>	<b>Pending Nov/Dec 2022 Invoices</b>	

As indicated in the cost Table 1 above, total project expenditures through October 2022 are \$3,232,500. Total project expenditures will be available once the November/December pay applications are received and processed. Expected total project costs are estimated between \$4M and \$4.5M.

### 3. Recurring Costs because of the Collapse

As a direct result of this collapse, plans were established for expanded and expedited rehabilitation projects for interceptors in a condition with the potential for collapse. The upstream 48" Westside Interceptor SAS lines have been prioritized specifically because of the collapse. Within the first few weeks of the collapse, Centralized Engineering utilized an on-call engineering consultant to put together a 30% rehabilitation design package for the upstream westside interceptor. This design package encompasses the ~2.2 miles of unlined upstream 48-inch westside interceptor piping which is likely in similar condition to the collapsed pipe segments (project titled *Westside Interceptor I-40 to Western Trail* in the table below). This design package is currently being finalized but has been provided to a Contractor for cost estimating; these cost estimates will be provided in November/December 2022, with construction tentatively scheduled for March/April 2023. The rough budgetary cost range for this work is \$12M to \$15M.

The Water Authority has also increased the urgency of the interceptor rehabilitation program overall based on the significant need for upgrades. This increased priority includes an additional \$30M of funding allocated in FY23 for interceptor rehabilitation and is also adjusting future annual interceptor rehabilitation expenditures (FY24 and beyond) to \$15M to \$20M annually, with a goal of rehabbing at least 3 to 5 miles of interceptor piping annually.

The following Table 2 summarizes the interceptor rehabilitation projects currently in Bidding/Construction, as well as the design packages that have been prepared and are essentially ready for bidding/construction, and the design packages that have been initiated in FY23. As this table shows, between FY23/FY24 the Water Authority will spend at least \$47 million on interceptor rehabilitation.

**Table 2: Prioritized Interceptor Projects to be Completed through FY24**

Project Name	Status	Planned Completion Date	Estimated Cost	Contractor Info
FY21-1 Interceptor Rehab Package A – <i>CDM-Smith</i>	Complete	Aug 2022	\$8.0 M	InSituForm
FY21-2 Interceptor Rehab Package B – <i>CH2M/Jacobs</i>	In Construction	Dec 2022	\$9.0 M	InSituForm
FY21-3 Interceptor Rehab Package C – <i>Wood</i>	RFO/Bidding	Aug 2023	\$5.0 M	To Be Determined
San Pasquale Interceptor MH Rehab Package - <i>Garver</i>	In Progress	Jan 2023	\$1.0 M	AUI
FY22 KAFB Interceptor Rehab Package – <i>Smith</i>	In Construction	Oct 2023	\$12M (ARPA)	RMCI
Westside Interceptor I-40 to Western Trail - <i>Smith</i>	30% Sept 2022 Final Apr 2023	Nov 2023	\$12M	To Be Determined
		<b>FY23/FY24 TOTAL</b>	<b>\$47M</b>	

#### **4. Comprehensive Plan to Eliminate Similar Violations from Occurring**

Although the violations cited in the administrative order will have been eliminated and returned to compliance within thirty days, the potential for any of the violations to reoccur will continue to be mitigated by the Water Authority over the next few years.

In January 2023 the Southside Wastewater Reclamation Plant (SWRP) will have completed the improvements to the UV disinfection process and can begin collecting data to confirm or assess the effectiveness of those improvements on both E. coli and mercury concentrations. If there are still problems after the improvements to the UV disinfection process are complete, in order to eliminate the E.coli and mercury exceedances from occurring again, in FY24 the SWRP management will engage the services of an engineering consulting firm to develop a preliminary engineering report that will review current unit treatment process operations and identify the best engineered unit process treatment modifications or the addition of other unit treatment processes with the overall goal of meeting all discharge water quality standards over time. It is expected that a solution would be selected, and funding established for design and construction of the treatment process in FY25.

As described in the recurring costs section, five expedited interceptor rehabilitation projects are expected to be completed by October 2023 and annually afterwards there will be expenditures of at least \$15M-\$20M for interceptor rehabilitation projects as a priority until the interceptors identified as high risk are addressed. This will be done utilizing existing Capital Improvement Program (CIP) budget funds as well as any additional external funding sources that can be obtained.

The February 2020 Interceptor Asset Management Plan update shows that the Water Authority has over 245 miles of total interceptor piping, with almost 80 miles of quickly degrading pipe (reinforced concrete pipe, concrete pipe, and corrugated metal pipe) based on High, Severe, and Extreme Risk scores. Since 2018, approximately 1 to 2 miles of Interceptor pipe has been rehabbed each year, utilizing approximately \$8M to \$12M of capital improvement projects budget funding annually. Overall, after the immediate need projects are completed in FY24, the Interceptor Rehabilitation Program will see about an \$8M increase in annual expenditures.

The project list below in Table 3 shows the current capital improvement project priorities to be completed after FY24, but this project list may be adjusted once additional CCTV inspections are complete and the highest priority projects identified. Ongoing CCTV activities may reveal specific segments of interceptor SAS piping that may need to be prioritized ahead of existing design packages. To that end, the Water Authority will make these prioritization decisions based on industry-specific condition assessment observations and existing SAS collector system knowledge, to make every effort to rehabilitate pipe that is in imminent risk of collapse, and to avoid future SAS interceptor collapses.

**Table 3: Future Interceptor Rehabilitation Projects to be Assigned after FY24**

<b>**KNOWN INTERCEPTOR REHABILITATION NEEDS</b>				
<b>Project Funding and Construction Schedule to be Assigned</b>				
<b>Project Name</b>	<b>Status</b>	<b>Schedule Considerations</b>	<b>Estimated Cost</b>	<b>Contractor Info</b>
Grit Collection Station – 12 <sup>th</sup> & I-40 – <i>WHPacific/NV5</i>	95% - Shelf	Ready to Bid	\$1.0 M	To Be Determined
Westside Interceptor Rehab	95% - Shelf	Ready to Bid	\$5.0 M	To Be Determined
Old Coors to Arenal – <i>Smith</i>				
FY17 Westside Interceptor Rehab Arenal to Blake - <i>Carollo</i>	95% - Shelf	Ready to Bid	\$7.0M	To Be Determined
FY17 Menaul Interceptor Rehab – University to Girard - <i>Carollo</i>	95% -Shelf	Ready to Bid	\$4 M	To Be Determined
Viola from Barcelona to Blake – <i>CDM-Smith</i>	Design awarded,	Ready to Bid in July 2023	\$5M	To Be Determined
	work order pending			
FY23-1 – Package I 12 <sup>th</sup> St. from Bellrose to I-40 - <i>Garver</i>	Design awarded,	Ready to Bid in July 2023	\$7M	To Be Determined
	work order pending			
FY23-2 – Package D 2 <sup>nd</sup> St. from Woodward to Baseball Fields - <i>Wilson</i>	Design awarded,	Ready to Bid in July 2023	\$6M	To Be Determined
	work order pending			
FY23-3 – Package E Barr Canal between Woodward & Rio Bravo – <i>Souder Miller</i>	Design awarded,	Ready to Bid in July 2023	\$4M	To Be Determined
	work order pending			
FY23-4 – Package Z PDN West of Jefferson – <i>Wood/WSP</i>	Design awarded,	Ready to Bid in July 2023	\$2M	To Be Determined
	work order pending			

\*\* Funding and construction priorities listed in this table are subject to change as additional information is available on project priorities.

Finally, if approved by the EPA, Pueblo of Isleta and other stakeholders, the Water Authority will plan a practice spill to the river response event with all stakeholders by November 2023 to improve immediate spill to the river response planning and notification times to the Pueblo of Isleta.



## 5. Sanitary Sewer Overflows from October 1, 2019-2022

All the sanitary sewer overflows at the Southside Water Reclamation Plant were contained on site and none reached the Rio Grande.

**Table 4: Southside Water Reclamation Plant (SWRP) Sanitary Sewer Overflows**

Calendar Year	Date	Volume	Units	Category	Containment	Cause	Duration	Location
2019	no sanitary sewer overflows occurred at the plant in 2019							
2020	2/18/2020	400	gallons	2	Contained on site	Pipe clog	60 minutes	SWRP
	7/24/2020	30,000	gallons	2	Contained on site	Power loss	8 hours	SWRP
	8/3/2020	100	gallons	2	Contained on site	Pipe rupture	1 minute	SWRP
	11/3/2020	800	gallons	2	Contained on site	Pipe clog	10 minutes	SWRP
2021	1/8/2021	100	gallons	2	Contained on site	Pump failure	10 minutes	SWRP
	2/25/2021	100	gallons	2	Contained on site	Pipe clog	10 minutes	SWRP
	3/24/2021	40,000	gallons	2	Contained on site	Power loss	10 minutes	SWRP
	7/31/2021	20,000	gallons	2	Contained on site	Power loss	10 minutes	SWRP
2022	11/2/2022	720	gallons	2	Contained on site	Pipe clog	2 minutes	SWRP

The sanitary sewer overflows throughout the collection system since October 2019 had one event that reached the river. All other overflows were contained and cleaned up before reaching the Waters of the US.

**Table 5: Collection System Sanitary Sewer Overflows**

Date of SSO	Duration (HH:MM)	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Reported Cause of Overflow	Observed Environment Impacts*	Ultimate Discharge Location
10/12/2019	2:02	4729 SOUTHERN AVE SE	122	50	GREASE	NEAH	PAVED STREET
11/6/2019	:59	6320 SAN FRANCISCO DR NE	5,900	5,500	UNKNOWN	NEAH	DIRT ARROYO
11/13/2019	:48	9201 APACHE PINE WY NE	60	40	GREASE	NEAH	PAVED STREET
11/21/2019	:53	2401 JENSEN DR NE	5,300	500	RAGS	NEAH	PAVED STREET
1/12/2020	1:52	5601 JEFFERSON ST NE	5,600	5,600	GREASE/RAGS	NEAH	STORM SEWER
1/17/2020	:35	4825 ISLETA BLVD SW	4,326	1,200	CONSTRUCTION	NEAH	YARD
2/12/2020	:34	1209 RICHMOND DE SE	3,400	1,000	GREASE	NEAH	STORM SEWER
2/27/2020	:34	2501 PHOENIX AVE NE	1,700	700	RAGS	NEAH	PAVED STREET
2/29/2020	2:10	227 JOHN ST SE	3,250	1,000	GREASE	NEAH	PAVED STREET

Date of SSO	Duration (HH:MM)	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Reported Cause of Overflow	Observed Environment Impacts*	Ultimate Discharge Location
3/12/2020	:48	8716 RANCHER RD SW	48	30	UNKNOWN	NEAH	PAVED STREET
3/24/2020	:36	1300 CUATRO CERROS TRL SE	60	50	RAGS/ROOTS	NEAH	PAVED STREET
4/1/2020	:29	1700 LOMAS BLVD NE	725	725	GREASE/RAGS	NEAH	PAVED STREET
4/18/2020	1:10	1025 BROADWAY BLVD SE	350	350	GREASE/RAGS	NEAH	PAVED STREET
4/30/2020	:30	4501 JUAN TABO BLVD NE	300	300	ROOTS/GREASE	NEAH	PAVED STREET
5/1/2020	:36	700 SAGEWOOD CT SE	900	800	RAGS/ROOTS	NEAH	PAVED STREET
6/16/2020	:41	2101 LOUISIANA BLVD NE	75	50	GREASE	NEAH	PARKING LOT
6/27/2020	3:07	RUNNING BEAR AVE SE & WHITE DOVE ST SE	935	-	VANDALISM	NEAH	PAVED STREET
10/6/2020	:59	5022 ARROYO CHAMISA RD NE	1,475	1,475	GREASE	NEAH	CONCRETE ARROYO
10/12/2020	:02	4300 PROSPECT AVE NE	100	100	CONSTRUCTION	NEAH	CONCRETE ARROYO
11/26/2020	1:21	425 LOUISIANA BLVD SE	25	25	RAGS	NEAH	PAVED STREET
12/16/2020	1:07	5551 MIDWAY PARK PL NE	100	100	LINE FAILURE	NEAH	PAVED STREET
1/22/2021	:35	1228 DEL MASTRO DR SW	700	600	GREASE/RAGS	NEAH	PAVED STREET
1/23/2021	2:18	COORS BLVD SW & PAJARITO RD SW	100	-	CONTROLLER	NEAH	PAVED STREET
3/5/2021	0:18	3528 CAMPBELL FARM LN NW	55	55	GREASE/RAGS	NEAH	OTHER
3/17/2021	0:55	4001 PRINCE ST SE	275	275	RAGS	NEAH	PAVED STREET
4/3/2021	3:53	13004 GLENWOOD HILLS CT NE	50	-	ROOTS/GREASE	NEAH	DIRT ARROYO
4/10/2021	1:52	6200 INDIAN SCHOOL RD NE	5,600	5,600	DEBRIS/VANDALISM	NEAH	CONCRETE ARROYO
4/17/2021	0:44	DON LUIS RD SW	220	110	GREASE/RAGS	NEAH	DIRT STREET
4/20/2021	0:20	4401 4TH ST NW	100	-	GREASE	NEAH	PAVED STREET
7/31/2021	2:41	7228 VALLE JARDIN LA NW	800	800	GREASE/RAGS	NEAH	STORM SEWER

Date of SSO	Duration (HH:MM)	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Reported Cause of Overflow	Observed Environment Impacts*	Ultimate Discharge Location
11/18/2021	1:00	MARLA DR NE & MONTGOMERY BLVD NE	1,500	500	RAGS	NEAH	STORM SEWER
12/18/2021	0:50	7900 SAN PEDRO DR NE	3,100	2,500	GREASE/RAGS	NEAH	CONCRETE ARROYO
12/25/2021	0:20	13125 ALICE AVE NE	100	35	GREASE	NEAH	PAVED STREET
1/13/2022	0:30	8901 BLUEWATER RD NW	750	750	GREASE	NEAH	CONCRETE ARROYO
1/17/2022	3:14	1200 RIVERVIEW DR NW	4,850	-	GREASE	NEAH	OTHER BOSQUE
1/17/2022	2:59	1111 RIO GRANDE BLVD NW	455	400	GREASE	NEAH	PAVED STREET
1/22/2022	2:00	13800 GRADY CT NE	500	200	ROOTS	NEAH	OTHER DIRT SHOULDER
1/23/2022	1:45	13800 GRADY CT NE	300	150	ROOTS	NEAH	OTHER DIRT SHOULDER
2/5/2022	2:39	8624 HAWK EYE RD NW	7,950	-	DEBRIS/GREASE	NEAH	DIRT ARROYO
2/14/2022	2:42	1010 LAS LOMAS RD NE	25	-	DEBRIS	NEAH	PAVED STREET
2/20/2022	1:05	8512 HILTON AVE NE	325	325	GREASE	NEAH	PAVED STREET
4/13/2022	1:01	HIDDEN VALLEY RD SE & FOUR HILLS RD SE	9,400	-	GREASE/RAGS	NEAH	DIRT ARROYO
4/14/2022	2:45	717 FENNEL CT SE	50	-	DEBRIS	NEAH	YARD
4/20/2022	1:36	6956 FOREST HILLS	288	100	RAGS	NEAH	PAVED STREET
4/24/2022	2:29	12000 BAJA DR NE	7,450	5,000	ROOTS/GREASE / RAGS	NEAH	CONCRETE ARROYO
4/26/2022	0:36	2331 DON LUIS RD SW	180	-	GREASE	NEAH	YARD
5/1/2022	1:20	HIDDEN VALLEY DR SE & SAGEWOOD CT SE	150	-	ROOTS	NEAH	PAVED STREET
5/10/2022	0:52	KATHRYN AVE SE & DICKERSON DR SE	260	200	GREASE	NEAH	PAVED STREET
5/23/2022	0:20	3913 LOUISIANA BLVD NE	200	200	RAGS	NEAH	PAVED STREET
5/24/2022	0:28	MANZANO ST NE & COPPER AVE NE	60	60	GREASE	NEAH	PAVED STREET

Date of SSO	Duration (HH:MM)	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Reported Cause of Overflow	Observed Environment Impacts*	Ultimate Discharge Location
7/10/2022	6:06	6100 ILIFF RD NW 64TH & HANOVER	6,744,100	3,000,000	LINE FAILURE	OEEI	RIO GRANDE (Waters of the US)
7/13/2022	0:55	8403 PHOENIX AVE NE	75	65	RAGS	NEAH	PAVED STREET
8/7/2022	1:21	14334 MARQUETTE DR NW	405	405	GREASE	NEAH	PAVED STREET
8/26/2022	4:30	13501 DURANT AVE NE	2,800	2,000	ROOTS	NEAH	PAVED STREET
9/5/2022	0:35	6250 PASO DEL NORTE NE	6,600	1,000	GREASE/RAGS	NEAH	DIRT ARROYO

\* **NEAH** = No Evidence of Adverse Health Impacts; **OEEI** = Observed Evidence of Environmental Impact