



Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	09/21/2022	
Media Program:	Water	
Regulatory Program(s)	NPDES	
Company Name:	Albuquerque Bernalillo County Water Utility Authority (ABCWUA)	
Facility Name:	Southside Water Reclamation Plant (SWRP)	
Facility Physical Location:	4201 2 nd Street SW	
(city, state, zip code)	Albuquerque, NM 87105	
Mailing address:	Post Office Box 568	
(city, state, zip code)	Albuquerque, NM 87103	
County/Parish:	Bernalillo	
Facility Phone Number	505-289-3382/505-803-1970	
Facility Contact:	Danielle Shuryn	Compliance Division Manager
	dshuryn@abcwua.org	
FRS Number:	110000567075	
Identification/Permit Number:	NM0022250	
Media Identifier Number:	NA	
NAICS:	221320	
SIC:	4952	
Personnel participating in inspection:		
Steve Lujan	ABCWUA	Asst. O/M Superintendent Water Reclamation -Operations
Merat Zarreii	ABCWUA	NPDES Program Manager
Danielle Shuryn	ABCWUA	Compliance Division Manager
Meghan McDonnell, P.E.	ABCWUA	Quality Assurance System Manager
Shawn Hardeman	ABCWUA	Water Quality Laboratory Program Manager
Mark Holstad, P.E	ABCWUA	Chief Engineer-Field
Jared Ray	ABCWUA	OPS/Main Supt Maintenance
Stan Allred	ABCWUA	Operations & Business Services
Johanna Malouff	ABCWUA	Senior Engineer-Field
Hobert Warren	ABCWUA	Fieldplant Division Manager
David A Esparza, P.E.	R6-ECDWM	Environmental Engineer
EPA Lead Inspector Signature/Date		
	David Esparza	09/21/2022
Supervisor Signature/Date		
	Roberto Bernier	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspector David Esparza arrived at the Albuquerque Bernalillo County Water Utility Authority (ABCWUA)-Southside Water Reclamation Plant (SWRP) at 8:30 AM on September 21, 2022, for an unannounced Compliance Evaluation Inspection (CEI). We met with Steve Lujan, ABCWUA Asst. O/M Superintendent Water Reclamation - Operations, Mark Holstad, P.E, ABCWUA Chief Engineer-Field, Ms. Danielle Shurn, ABCWUA Compliance Manager, Merat Zarreii, ABCWUA NPDES Program Manager, Ms. Meghan McDonnell, P.E. ABCWUA Quality Assurance System Manager, Jared Ray, ABCWUA OPS/Main Supt Maintenance, Ms. Johanna Malouff, ABCWUA Senior Engineer-Field, Hobert Warren, ABCWUA Fieldplant Division Manager, Stan Allred, ABCWUA Operations & Business Services and Shawn Hardeman, ABCWUA Water Quality Laboratory Program Manager. I presented his credentials to Mr. Holstad and informed him that this was an EPA inspection to determine the SWRP's compliance under the Clean Water Act (CWA). This CEI was conducted under the authority of the National Pollutant Discharge Elimination System (NPDES) permit program, in accordance with the CWA. The generation of this report is based on information supplied by ABCWUA representatives, observations made by the United States Environmental Protection Agency (US EPA) inspector, and records and reports maintained by the permittee (ABCWUA), and the US EPA. Before leaving the facility, an exit briefing was held with Mr. Steve Lujan, Asst. O/M Superintendent Water Reclamation -Operations, and the above-mentioned staff representatives, to explain areas of concern noted at the time of the inspection and discuss the Capacity Management Operations and Maintenance (CMOM) checklist forwarded via electronic mail (email) earlier in the morning.

FACILITY DESCRIPTION

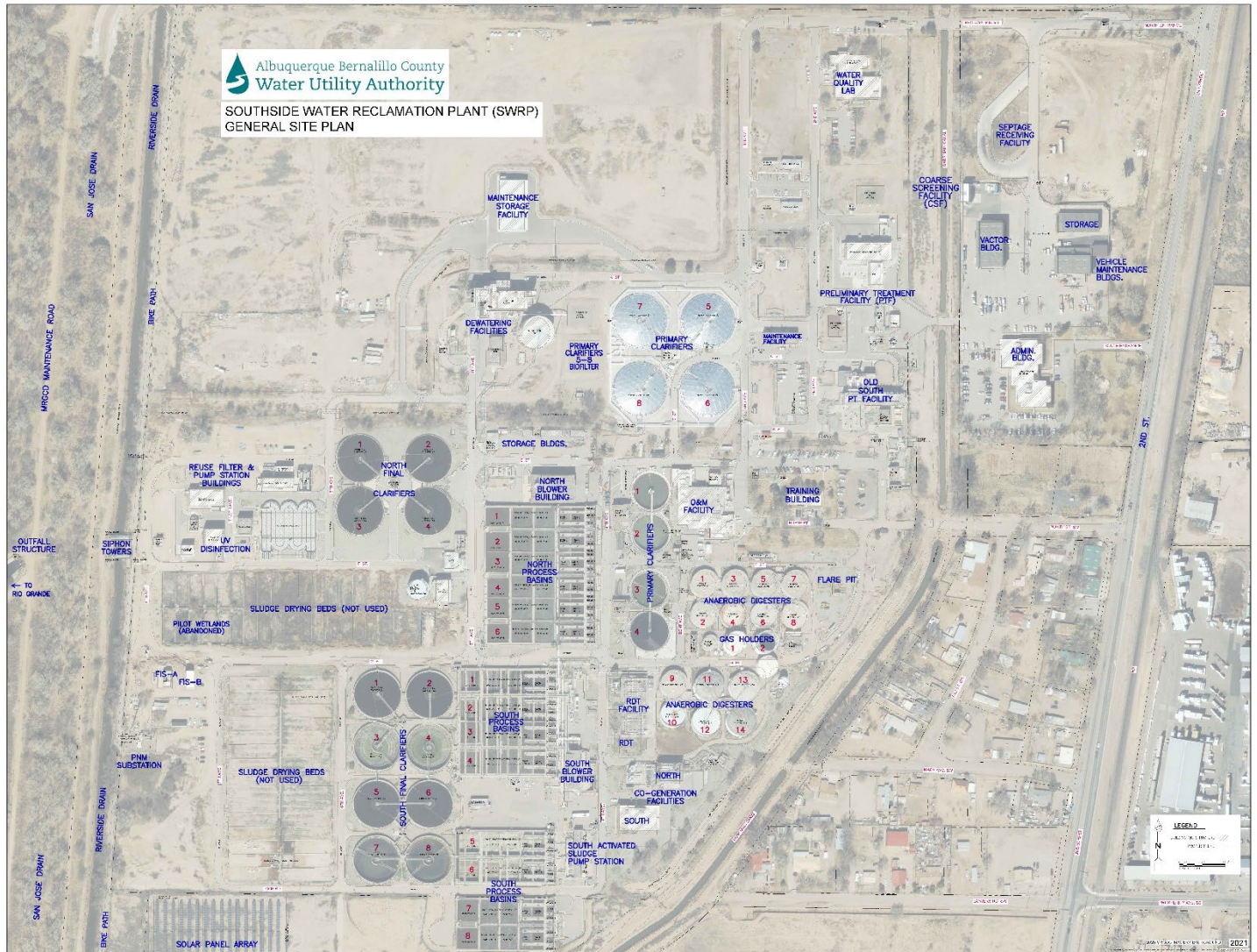
The ABCWUA SWRP is located at 4201 Second Street SW in the City of Albuquerque, Bernalillo County, New Mexico ((depicted in **Aerial Image #1** below). Coordinates to the SWRP facility are Latitude 35° 01' 04" North and Longitude - 106° 40' 13" West.

The ABCWUA SWRP design capacity is 76 million gallons/day (MGD). Present flows average about 55 MGD. The population served is approximately 600,000 with an industrial flow contribution of about 15%. The facility operates two (2) shifts and is open 24 hours/7 days per week. The shifts are comprised of 5-operators and 2 supervisors. The entire facility is gated, and limited access is maintained.

The existing treatment process contains: Head works – 6 mechanical bar screens of which 2 are low level screens and 4 are high level screens (with a capacity of 20 MGD each), Grit Chambers – 5 grit removal structures (3 vortex units and 2 aerated chambers), Clarification – 8 primary clarifiers together with 4 north and 8 south final clarifiers. Each clarifier is circular with a conic design having a side wall depth of 13 feet. Reported capacity of each clarifier is 1.6 million gallons. All clarification units are equipped with surface skimmers and sludge scraper assemblies. Aeration Basins – 14 aeration basins (each basin contains 3 anoxic zones followed by 2 swing zones 3 oxic zones, 1 dissolved oxygen control zone and a recycle pump). Additionally, the anoxic and swing zones are equipped with 1 vertical shaft mixer and two shaft mixers in the swing zone, respectively. The oxic zones are aerated by 12 centrifugal blowers. Four, are in the north blower building and eight are in the south blower building.

The SWRP utilizes Ultra-violet light to disinfect the treated effluent prior to discharging to Outfall 001 and into the Rio Grande.

The SWRP maintains and operates 38 sanitary lift stations (LS) and 10 vacuum stations (Identified in **Table 1** and **Table 2** below). Additionally, the facility maintains back-up power to all LS and vacuum stations, inclusive of a quarterly testing program.



Aerial Image 1: Overall view of the ABCWUA’s Southside Water Reclamation Plant (SWRP). Aerial provided by ABCWUA.

Table 1: ABCWUA Sanitary Lift Stations

Station Number	Location	Status	Back-up Power (type)
302	924 Commercial St.SE	active	Quick connect
304	2265 Arenal SW	active	Quick connect
305	2600 New York NW	active	Quick connect
306	915 Broadway Blvd NE	active	Quick connect
307	621 Heather Lane SW	active	Quick connect

308	2860 Rio Bravo Blvd SW	active	Quick connect
309	210 Sandia View Rd NW (Osuna) & 2nd	active	Quick connect
310	2700 Blake Road SW	active	Quick connect
312	5801 Barr Rd. SW	active	Quick connect
313	7400 Paseo Del Volcan NW	active	Onsite generator
314	7230 Paseo Del Volcan NW	active	Onsite generator
315	501 Rossmoor Rd SW (MH)	active	Quick connect
316	1600 Douglas MacArthur Rd NW (MH)	active	Quick connect
317	2709 Apple Valley SW	active	Quick connect
318	Balloon Fiesta Park, E of AMAFCA north diversion channel	active	Quick connect
319	2260 Hooper & Foothill Rd SW (MH)	active	Quick connect
320	3914 Isleta Blvd SW	active	Onsite generator
322	1815 1/2 Gonzales Rd SW (MH)	active	Quick connect
323	3401 Duranes Rd NW	active	Quick connect
324	4080 Learning Rd NW	active	Onsite generator
325	8601 4TH St. NW (MH)	active	Quick connect
326	10123 2ND St. NW (MH)	active	Quick connect
327	102 Public School Rd (Tijeras Canyon)	active	Onsite generator
329	7910 1/2 Rio Grande NW & Ranchitos (MH)	active	Quick connect
352	8305 1/2 Rio Grande NW	active	Quick connect
353	6847 1/2 Rio Grande NW (MH)	active	Quick connect
354	1600 1/2 Francisca Rd NW (MH)	active	Quick connect
355	321 Industrial Ave NE (MH)	active	Quick connect
356	10036 2nd St. & Sanchez Rd. NW (MH)	active	Quick connect
358	105 Anderson Ave SE	active	Quick connect
380	8701 Universe NW (MH) TRAILS	active	Quick connect
381	10000 Vivald (MH) 6323 Orfeo	active	Quick connect
382	9500 1/2 Calle Chamisa NW (MH)	active	Quick connect
383	5800 Mafrag Ave. NW (MH) PARADISE	active	Quick connect
384	9607 Lyon NW (MH) SUNDANCE	active	Quick connect
385	10800 Corrales NW (MH)	active	Quick connect
386	7701 Compass Dr NW (MH)	active	Quick connect
388	9238 Dawn Patrol Tr. NE	active	Quick connect

NOTE: (MH) is a designation for manhole

Table 1: ABCWUA Vacuum Stations

Station Number	Location	Status	Back-up Power
357	4409 Rio Grande & Montano NW	active	Quick connect
361	5816 Isleta Blvd SW	active	Quick connect
362	1011 Paseo Del Norte & Chamisal Lateral	active	Onsite generator
363	2427 Jensen Dr SW	active	Onsite generator
364	5816 Isleta Blvd SW	active	Quick connect
365	101 Alameda Rd NE	active	Quick connect
366	2220 Raymac Rd SW	active	Quick connect
367	2701 Don Felipe SW	active	Quick connect
368	10005 N. Guadalupe Rd NW	active	Quick connect
369	7009 Coors Rd SW	active	Quick connect

Section II - OBSERVATIONS

- A review of the ABCWUA completed calendar year 2020 (CY2020) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment discusses Sanitary Sewer Overflow (SSO) Analysis (Refer to **Appendix 2** ABCWUA Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document- pages 5 thru 11). Additionally, the 2020 CMOM delineates an analysis of Sanitary Sewer Overflow events (ABCWUA CMOM- Appendix 1- page 17), inclusive of an analysis of the estimated SSO spill volumes and volumes recovered (ABCWUA CMOM- Appendix 2- page 18), related to the 17 SSO events for CY2020.
- A review of the ABCWUA completed calendar year 2021 (CY2021) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment discusses Sanitary Sewer Overflow (SSO) Analysis (Refer to **Appendix 2** ABCWUA Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document- pages 6 thru 11). Additionally, the 2021 CMOM delineates an analysis of Sanitary Sewer Overflow events (ABCWUA CMOM- Appendix 1- page 20), inclusive of an analysis of the estimated SSO spill volumes and volumes recovered (ABCWUA CMOM- Appendix 2- page 22), related to the 12 SSO events for CY2021.
- A review of the ABCWUA completed calendar year 2021 (CY2021) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document indicates a mechanism or written protocol in-place pertaining to Overflow Emergency Response (OERP) (Refer to ABCWUA CMOM- Appendix 4 - **Overflow Emergency Response (OERP)**).
- A review of the ABCWUA completed calendar year 2021 (CY2021) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document indicates a written mechanism in-place pertaining to a Fat, Oils, Grease and Solids (FOGS) protocol (ABCWUA CMOM pages 4, 5 and 13). Additionally, ABCWUA implemented a FOG Advertising Campaign (Refer to ABCWUA CMOM- Appendix 3 - **FOG Advertising Campaign**)
- A review of the ABCWUA completed calendar year 2020 and 2021 (CY2020 & CY2021) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document indicates implementation of a Goal Summary as part of their CMOM process (Refer to ABCWUA CMOM- Appendix 5 - **Goal Summary – CY2020 or CY2021 Report**)

Section III – AREAS OF CONCERN

A review of the ICIS database for the period from January 1, 2020, to September 20, 2022 (**Appendix 3**) indicates NPDES permit excursions.

- A review of the Integrated Compliance Information System (ICIS) indicates several NPDES permit single event violations (January, February, March, April, May, June, July, October, November and December 2020; February, March, April, July, November and December 2021; January, February, March, April, and May 2022), and effluent violations (March, May, June, August, September, and October 2020; January, February, June, September, October, and December 2021; January, April, May, June and July 2022).

The following additional areas of concern (AOCs) were identified after review of the information provided by the Albuquerque Bernalillo County Water Utility Authority :

- A review of the ABCWUA completed calendar year 2020 (CY2020) Capacity, Management, Operation and

Maintenance (CMOM) Self-Assessment discusses Sanitary Sewer Overflow (SSO) Analysis (Refer to **Appendix 2** ABCWUA Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document- pages 5 thru 11). Additionally, the 2020 CMOM delineates an analysis of Sanitary Sewer Overflow events (ABCWUA CMOM- Appendix 1- page 17), inclusive of an analysis of the estimated SSO spill volumes and volumes recovered (ABCWUA CMOM- Appendix 2- page 18), related to the 17 SSO events for CY2020.

- A review of the ABCWUA completed calendar year 2021 (CY2021) Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment discusses Sanitary Sewer Overflow (SSO) Analysis (Refer to **Appendix 2** ABCWUA Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment document- pages 6 thru 11). Additionally, the 2021 CMOM delineates an analysis of Sanitary Sewer Overflow events (ABCWUA CMOM- Appendix 1- page 20 of 26), inclusive of an analysis of the estimated SSO spill volumes and volumes recovered (ABCWUA CMOM- Appendix 2- page 22 of 26), related to the 12 SSO events for CY2021.

EPA Region 6 inspectors David Esparza, PE conducted a closing conference at ABCWUA/Southside Water Reclamation Plant (SWRP) at 1:50 PM (MST) on September 21, 2022, for the inspection. Additionally, the SSO events identified in the CY2020 and CY2021 ABCWUA completed CMOM were not included in the closing conference.

Section IV – FOLLOW UP

The following information was received by EPA, after exiting the Facility on September 21, 2022:

1. Organizational charts with respect to departments and staff.
2. Map(s) of the sanitary sewer system
3. Any Standard Operating Procedures (SOPs) pertaining to:
 - Unauthorized discharge response (Sanitary Sewer Overflows (SSOs)) events, inclusive of reporting procedure, SSO hotspots, memorialization, and work orders.
 - Lift station locations, and inspections
 - Complaint call responses
 - Fats, Oils and Grease (FOG) Program
 - Inflow and infiltration (I/I)
 - Condition Assessment
 - Capacity assessment
 - Current Budget
 - Current wastewater rates/fees
 - Capital Improvement Program
 - Cleaning and root control program- jetting and/or vacuuming schedule
 - City Ordinances
 - Code enforcement (FOG, MS4, laterals)
 - Asset management program and surveys
 - Operation and Maintenance (O&M) program protocol

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 4 photos taken 09/21/2022

Appendix 2 – ABCWUA CY2020 and CY2021 Capacity, Management, Operation and Maintenance (CMOM)

Self-Assessment

Appendix 3 – Review of the Integrated Compliance Information System (ICIS) Database for
the period from January 1, 2020, to August 31, 2022

Appendix 4 – Opening and Closing conference sign-in sheets

ABCWUA/Southside Water Reclamation Plant (SWRP)
NPDES Permit No. NM0022250
Albuquerque, New Mexico
Inspection Date 09/21/2022

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: ABCWUA/Southside Water Reclamation Plant (SWRP)		
City: Albuquerque	County/Parish: Bernalillo	State: New Mexico



View of process treatment equipment inside the Course Screening Facility (CSF). (DSCN2320)
Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: ABCWUA/Southside Water Reclamation Plant (SWRP)		
City: Albuquerque	County/Parish: Bernalillo	State: New Mexico



View of process treatment equipment inside the Rotating Drum Thickener Facility (RDT). (DSCN2321)
Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: ABCWUA/Southside Water Reclamation Plant (SWRP)		
City: Albuquerque	County/Parish: Bernalillo	State: New Mexico



View of ultra-violet (UV) disinfection banks inside the UV Disinfection Building before the Siphon Towers and the eventual discharge to the Rio Grande at Outfall 001. (DSCN2324) Photographed by D. Esparza



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: ABCWUA/Southside Water Reclamation Plant (SWRP)		
City: Albuquerque	County/Parish: Bernalillo	State: New Mexico



View of several centrifugal drums utilized in the thickening and dewatering of the sludge. (DSCN2326)
Photographed by D. Esparza

Appendix 2

ABCWUA CY2020 & CY2021 Completed Capacity, Management, Operation and Maintenance (CMOM) Self-Assessment Document

CMOM ANNUAL REPORT CY2020



Contents

Capacity, Management, Operations and Maintenance (CMOM) Plan Overview.....	2
Report Purpose.....	2
Permit Requirements.....	3
CMOM Program Self-Assessment.....	3
FOG Policy.....	4
FOG Enforcement.....	4
SSO Analyses.....	5
Permit Requirements.....	5
SSO Study Team.....	5
Causes & Mitigations	7
SSO Tabulation & Analysis.....	8
Volume Spilled and Recovered	10
Actions Implemented and On-Going Programs	11
General	11
FOG Policy Implementation:	11
Overflow Emergency Response Plan (OERP)	11
Closed Circuit Television (CCTV)	12
Cleaning Program Goal.....	13
Force Main Inspection Program.....	14
Root Foaming	14
Odor Complaints	14
Identified Gaps in the Water Authority Processes with Recommendation to Close	15
Prohibited Discharges, i.e., SSOs.....	15
Appendices.....	16
Appendix 1 Sanitary Sewer Overflow Analysis Table.....	17
Appendix 2 Sanitary Sewer Overflow Volume Captured Analysis Table.....	18
Appendix 3 Thanksgiving Day News Release.....	19
Appendix 4 Overflow Emergency Response Plan (OERP)	20
Appendix 5 Goal Summary - CY2020 Report.....	21

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 CY2020 CMOM Annual Report follows previous FY2013-17 and CY2017-19 reports. The previous reports, as well as the most recent, can be accessed at <https://www.abcwua.org/sewer-system-overview/>.

Appendix 4 provides a summary of goals established in this CY2020 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 were 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://mwr.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 FOG Policy sets a Water Authority goal of inspecting every FSE at least once every three years. Details of what is expected of the FSE in terms of Grease Removal System (GRS) functionality, pumping schedule, maintenance, and recordkeeping are identified. The FOG policy explains the Water Authority use of the 25% solids and grease rule (25 Percent Rule) to determine if a GRS is filled to capacity. The policy also contains Best Management Practices (BMPs) such as scraping plates, using screens, and not using emulsifiers, etc.

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

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

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

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

FOG Enforcement

In CY2020, the Water Authority Pretreatment Program had 1,725 compliant FSEs out of 2,151 FSE sites for a compliance rate of 80%. Seventy-three (73) FSE inspections were conducted with 46 passing, and 27 failing. Of the 27 failed inspections, 21 Notices of Violation were issued. Eight (8) of the 21 violations were resolved and the remainder are outstanding.

In response to SSOs, ten (10) FSE inspections were conducted with three (3) passing and seven (7) failing. Of the seven (7) failed inspections, three (3) Notice of Violations were issued and four (4) were corrected before issuance of violations.

In addition, Water Authority Pretreatment personnel distributed FOG brochures to FSEs, single-family residences and apartment complexes upstream of the SSOs.

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

SSO Analyses

Permit Requirements

The Permit requires a CMOM Plan. 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

Sewer Trouble Definitions		
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 2 Types of Causes for SSOs

Cause(s) of SSO from DMR		Causes determined from CCTV
CO - Construction	DB - Debris	SC - Surcharged
CU -Cause Unknown	RK -Rocks	SL - Sag in Line
EQ - Equipment Failure	GR - Grease	IT - Intruding Tap
SGG -Sand, grit or gravel	RT - Roots	MH - Manhole
LF - Line Failure	RN - Rainfall	OJ - Offset Joint
V - Vandalism	RGS -Rags	
RGR - Roots / Grease	BP -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 CY2020. (Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.)

Table 3 Summary of Causes from SSO Study

10-42, 10-48 Causes	Total	% of Total
Burp	1	4%
Construction	5	21%
Debris	1	4%
Grease	2	8%
Grease\Rags	2	8%
Grease\Sag in Line	1	4%
Line Failure	4	17%
Roots\Grease	1	4%
Roots	3	13%
Sag in Line	2	8%
Vandalism	1	4%
Equipment Failure	1	4%
Grand Total	24	100%

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. In CY2020, 33% of mitigations included performing rehab or replacement of the line, whereas in CY2019 more segments were added to the short interval cleaning program. 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 4 Summary Mitigations from SSO Study

10-42, 10-48 Mitigations	Total	% of Total
No Follow Up Needed	4	17%
Pretreatment Notified	1	4%
Pretreatment Notified/Special Instructions	1	4%
Repaired	2	8%
Rehab/Replace	8	33%
Special Cleaning	1	4%
Short Interval	2	8%
Short Interval/Rehab/Replace	1	4%
Short Interval/Special Instructions	3	13%
Special Instructions	1	4%
Grand Total	24	100%

SSO Tabulation & Analysis

Figure 1 shows the cumulative 10-42s by month for CY2012-20.

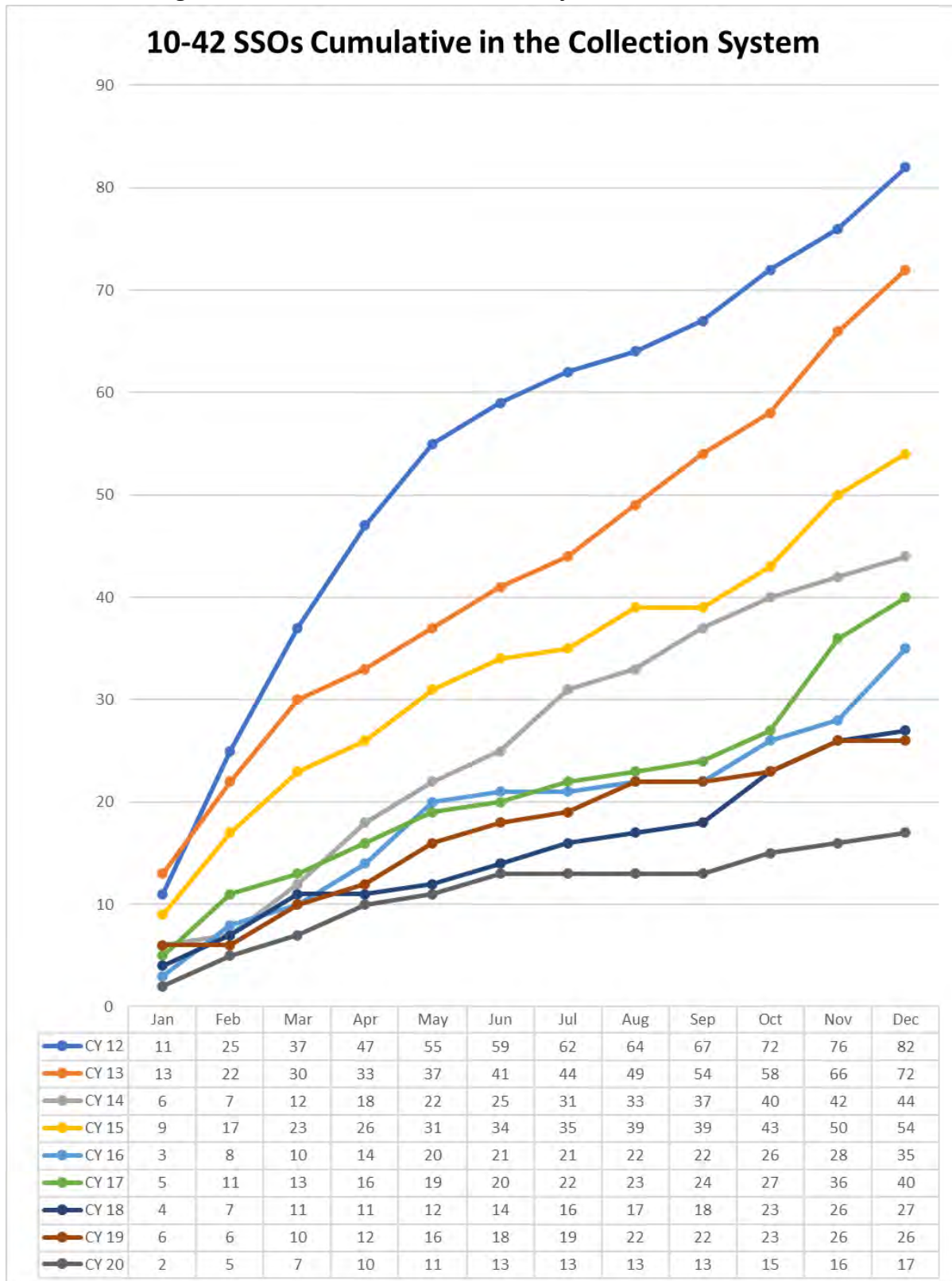


Figure 1 Reportable SSOs

Appendix 1 contains a list of every 10-42 and 10-48 event in CY2020. 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 and 0.7 for CY2012-20 respectively.

Figure 2 shows the total sewer troubles, i.e. 10-40s, -42s, and -48s by year for CY2012-20. This graph does not include 10-48s due to “burps” which are not due to a blockage or other failure resulting in the overflow of sewage. Instead, air displaced during the Vactor jetting cleaning can under certain circumstances force out the water in the home fixture P-traps, e.g. toilets and sinks. These sometimes result in claims and are therefore included in the Property Damage totals for completeness and consistency. There was only one burp during CY 2020. This burp is identified in Appendix 1.

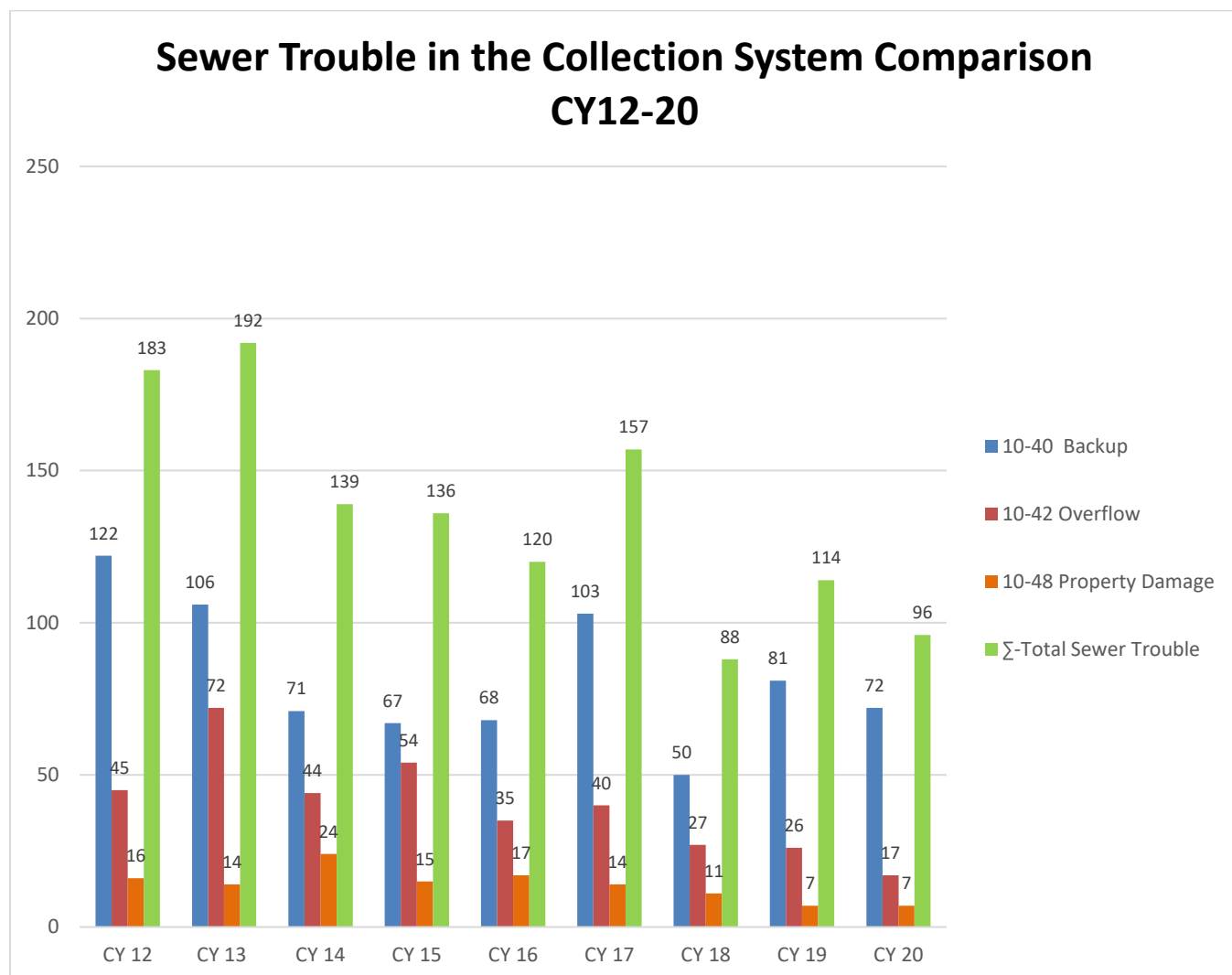


Figure 2 Sewer Trouble Comparison

Volume Spilled and Recovered

Via the OERP, the Water Authority has implemented a policy of capturing spills and documenting actions. Appendix 1 provides the Ultimate Discharge Location for each reported SSO. Appendix 2 provides estimated spill volumes and volumes recovered for 17 reported SSOs for CY2020. Of the spill volume estimated not to be recovered, none was identified as directly reaching the Rio Grande. No spills reached a facility operated by the MRGCD. It was estimated that approximately 54% of the estimated spill volume was recovered in CY2020 as shown in Appendix 2.

Actions Implemented and On-Going Programs

General

Below are gaps that were identified in the CY2019 CMOM Report and were closed in CY2020, or are on-going programs, or both. In addition to the commitments made in the CMOM Report, in CY2020, the following additional actions were taken to expand the Water Authority's ability to operate and maintain the system.

1. Two new Vectors were obtained and put into service.
2. Interceptor manhole inspection was performed using a panoramic camera on 100 manholes in CY2020. In CY2021, approximately 260 additional manholes will be inspected.
3. The Water Authority's Corrective Maintenance Report now includes the distance from the downstream manhole to a blockage.
4. The Water Authority's Public Affairs section continued to support SSO prevention efforts and the FOG Policy in CY2020 by reprising an advertising campaign aimed at discouraging disposal of improper materials in household drains and planting trees near sewer lines. A news release ran for the Thanksgiving Day holiday. Appendix 3 displays the news release. In addition to the holiday release, the media campaign is still in place with ads on television, radio, outdoor boards, social media, and water bill inserts.

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 was developed and implemented in CY2019 and a goal was set to develop an FSE flier in Chinese. However, it was determined that a Vietnamese flier was more prudent and this was developed in CY2020. The Water Authority has a three-year plan to distribute these fliers to all FSEs and continue to improve FOG inspections.

Overflow Emergency Response Plan (OERP)

This is an on-going program to update the OERP as required. In CY2020, 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 CY2019. The most current version of the OERP is posted to http://www.abcwua.org/Sewer_System.aspx

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 4 provides the CCTV goal for a ten-year basis and the actual CCTV inspection through CY2020. The CY2020 portion of this recommendation is complete. The CCTV program will continue. Anticipated schedule:

1. FY21: 5% of the small diameter.
2. FY22: 5% of the small diameter.
3. FY23: Large diameter unlined concrete pipe.
4. FY24: 5% of the small diameter.
5. FY25: 5% of the small diameter.
6. FY26: 5% of the small diameter.

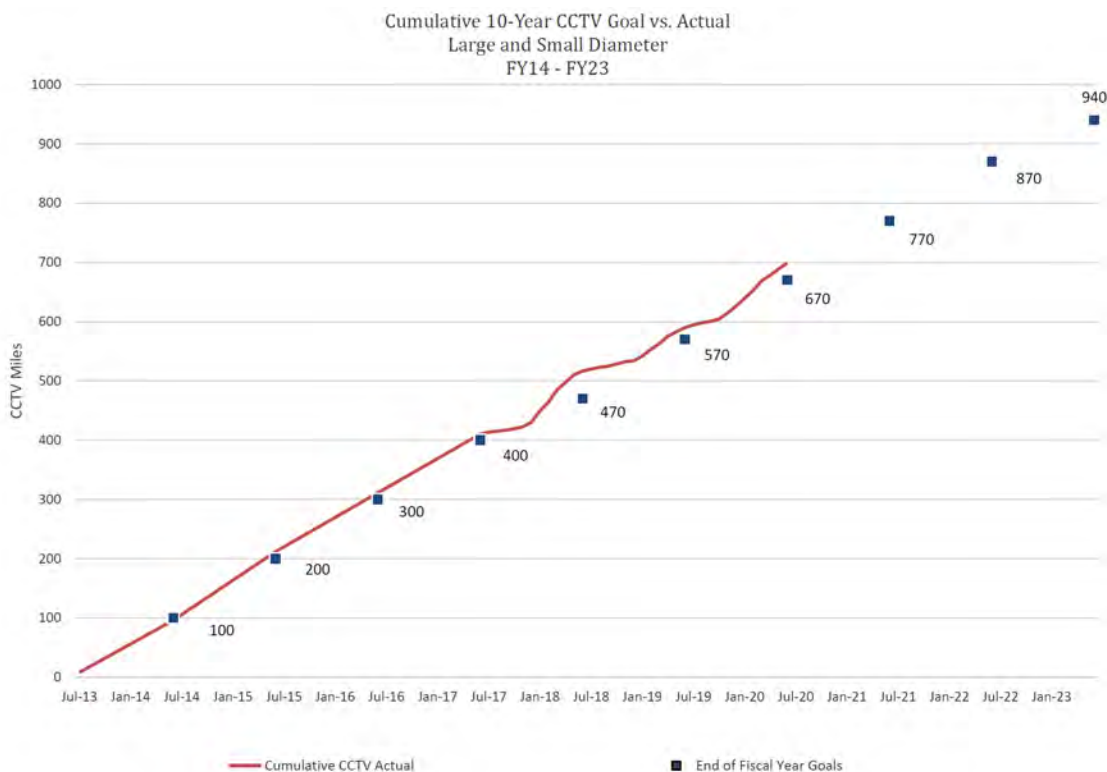


Figure 3 Small Diameter Sewer CCTVed vs. Ten-Year Goal

Cleaning Program Goal

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

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

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

The Water Authority is studying SSO rates in the Short Interval and the non-Short Interval portions of the Collection System. These studies are on-going and not yet complete. A possible outcome is a determination that total SSOs may be reduced by increasing the Short Interval cleaning per year and therefore decreasing the Sub-Basin cleaning per year. If so, the Water Authority would establish and monitor a different cleaning goal. This new goal would be established in a subsequent CMOM Annual Report.

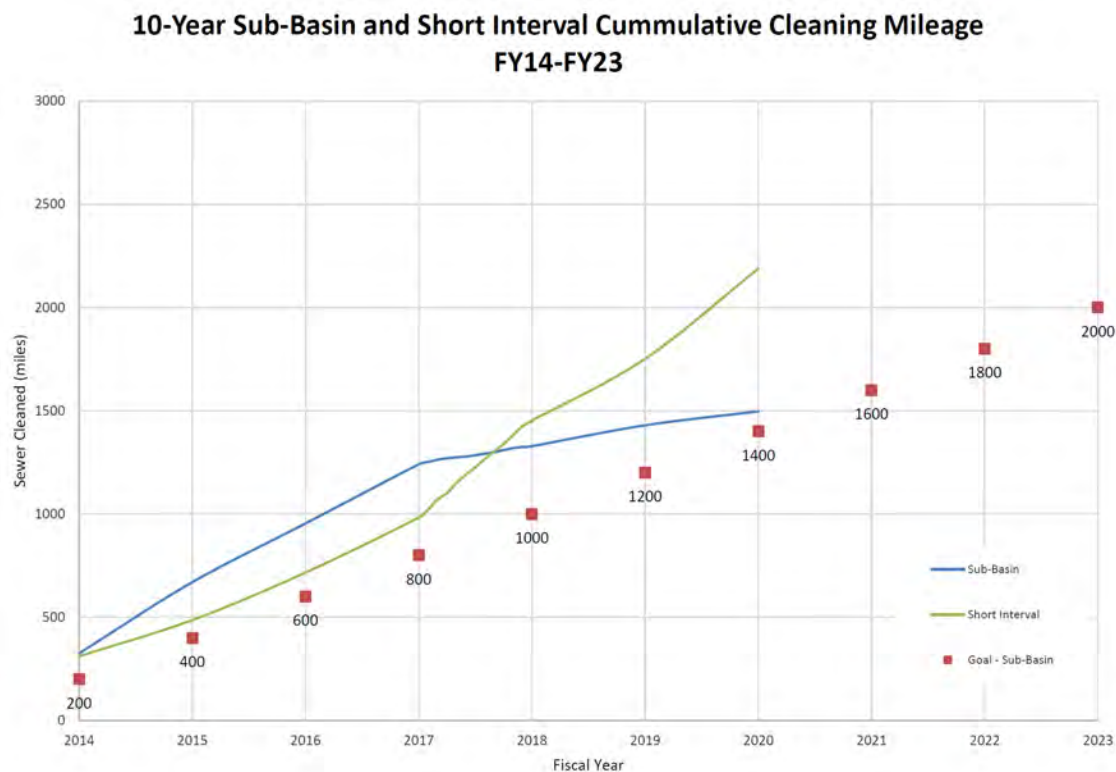


Figure 4 Small Diameter Sewer Cleaned vs. Ten-Year Goal

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.

Lift Station 20 pumps westside flow to the Southside Water Reclamation Plant (SWRP) via twin 30" ductile iron force mains. Per the CY2019 CMOM report, an air pocket profile was completed using a smart ball on the north force main in CY2020. A report was received and from development of this air pocket profile, air release valves (ARVs) were identified for replacement or relocation in coordination with the SWRP. In CY2021, the Water Authority will install replacement ARVs and then perform additional smart ball tests on both force mains.

Root Foaming

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

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

In CY2020, the final report for the Root Foaming Pilot project was completed. The report concluded that a root foaming program should not be implemented. Instead, efforts should be focused on existing cleaning programs specifically evaluating the effectiveness of the Short Interval program (frequency, selected lines, time of year, etc.).

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. Portable odor control carbon units were implemented in CY2020.

Identified Gaps in the Water Authority Processes with Recommendation to Close

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

Prohibited Discharges, i.e., SSOs

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

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

Appendices

Appendix 1 Sanitary Sewer Overflow Analysis Table

Type			DMR														SSO Team Study		Enforcement		
10-42	10-48	10-42 & 10-48	Maximo WO #	Diameter	Repeat	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		732025	8	N	N	1/6/2020	12:01 PM	3:14	5010 ALAMEDA BLVD NE	NA	LF	NA	CC	NA	NA	LF	RH			
	X		732110	10	Y	N	1/6/2020	4:00 PM	4:30	3401 SMITH AVE SE	NA	GR/RGS	NA	CC	NA	NA	SL	SI/SP			
X			741697	8	N	N	1/12/2020	11:28 AM	1:52	5601 JEFFERSON ST NE	5,600	GR/RGS	NEAH	CC/HTH/CWW/RCS/WD	SD	5,600	GR	PT/SI	x	7	1
X			749443	8	N	N	1/17/2020	11:00 AM	:35	4825 ISLETA BLVD SW	4,326	CO	NEAH	HTH/CWW/RP/WD	YD	1,200	CO	NF			
	X		776513	8	N	N	2/6/2020	11:53 AM	:30	701 DON CIPRIANO CT NE	NA	RGS	NA	CC	NA	NA	SL	SI			
		X	784233	8	Y	N	2/12/2020	6:11 PM	:34	1209 RICHMOND DE SE	3,400	GR	NEAH	CC/HTH/PO/CWW/WD	SD	1,000	LF	RH			
X			810255	8	N	N	2/27/2020	3:31 PM	:34	2501 PHOENIX AVE NE	1,700	RGS	NEAH	CC/HTH/CWW/RP/WD	PST	700	DB	SC			
X			813434	36	N	N	2/29/2020	3:14 PM	2:10	227 JOHN ST SE	3,250	GR	NEAH	CC/HTH/ CWW/WD	PST	1,000	CO	RH			
	X		834267	8	Y	N	3/10/2020	6:26 PM	:41	312 WELLESLEY DE SE	NA	RGS/ RT	NA	CC	NA	NA	RT	SI/SP			
X			837705	8	N	N	3/12/2020	9:47 AM	:48	8716 RANCHER RD SW	48	CU	NEAH	CC/HTH/IN/PO/CWW/WD	PST	30	CO	NF			
X			856480	8	N	N	3/24/2020	2:24 PM	:36	1300 CUATRO CERROS TRL SE	60	RGS/RT	NEAH	CC/HTH/RS/WD	PST	50	RT	SI/SP			
	X		865633	8	Y	N	3/30/2020	7:05 AM	2:30	1418 CENTRAL AVE SE	NA	GR	NA	CC	NA	NA	GR/SL	RH			
X			869146	8	N	N	4/1/2020	11:51 AM	:29	1700 LOMAS BLVD NE	725	GR/RGS	NEAH	CC/HTH/CWW/WD	PST	725	GR/RGS	PT	x	2	2
X			902511	24	N	N	4/18/2020	4:30 PM	1:10	1025 BROADWAY BLVD SE	350	GR/RGS	NEAH	CC/HTH/CWW/RP/RS/WD	PST	350	GR/RGS	SI/RH			
X			921719	8	Y	Y	4/30/2020	8:10 AM	:30	4501 JUAN TABO BLVD NE	300	RGR	NEAH	CC/HTH/RP/WD	PST	300	LF	RH			
X			923989	8	Y	N	5/1/2020	1:39 PM	:36	700 SAGEWOOD CT SE	900	RGS/RT	NEAH	CC/HTH/BR/RP/WD	PST	800	RT	RH			
X			1013555	8	N	N	6/16/2020	10:19 AM	:41	2101 LOUISIANA BLVD NE	75	GR	NEAH	CC/HTH/RP/RS/WD	PL	50	GR	RH	x	4	4
	X		1073425	8	N	N	6/24/2020	11:26 AM	1:00	1233 COLUMBIA DR NE	NA	BP	NA	IN	NA	NA	BP	SP			
X			1041311	8	N	N	6/27/2020	11:23 PM	3:07	RUNNING BEAR AVE SE & WHITE DOVE ST SE	935	V	NEAH	CC/HTH	PST	-	V	NF			
X			1259702	8	N	N	10/6/2020	12:31 PM	:59	5022 ARROYO CHAMISA RD NE	1,475	GR	NEAH	CC/HTH/CWW/RS/WD	AC	1,475	RGR	SI			
X			1274518	30	N	N	10/12/2020	11:28 AM	:02	4300 PROSPECT AVE NE	100	CO	NEAH	HTH/RP/RS/WD	AC	100	CO	NF			
X			1373373	12	N	N	11/26/2020	3:29 PM	1:21	425 LOUISIANA BLVD SE	25	RGS	NEAH	CC/HTH/CWW/WD	PST	25	CO	RH			
	X		1376051	3	N	N	11/29/2020	11:00 AM	4:15	1026 WESTERN MEADOWS CT NW	NA	EQ	NA	ET/T	NA	NA	EQ	REP			
X			1394696	2	N	N	12/16/2020	11:53 AM	1:07	5551 MIDWAY PARK PL NE	100	LF	NEAH	HTH/RP/WD	PST	100	LF	REP			

CY2020 10-42 SPILL VOLUME AND VOLUME RECOVERED

Maximo WO #	Date of SSO	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Volume Not Recovered	% Recovered
741697	1/12/2020	5601 JEFFERSON ST NE	5,600	5,600	-	100%
749443	1/17/2020	4825 ISLETA BLVD SW	4,326	1,200	3,126	28%
7844233	2/12/2020	1209 RICHMOND DE SE	3,400	1,000	2,400	29%
810255	2/27/2020	2501 PHOENIX AVE NE	1,700	700	1,000	41%
813434	2/29/2020	227 JOHN ST SE	3,250	1,000	2,250	31%
837705	3/12/2020	8716 RANCHER RD SW	48	30	18	63%
856480	3/24/2020	1300 CUATRO CERROS TRL SE	60	50	10	83%
869146	4/1/2020	1700 LOMAS BLVD NE	725	725	-	100%
902511	4/18/2020	1025 BROADWAY BLVD SE	350	350	-	100%
921719	4/30/2020	4501 JUAN TABO BLVD NE	300	300	-	100%
923989	5/1/2020	700 SAGEWOOD CT SE	900	800	100	89%
1013555	6/16/2020	2101 LOUISIANA BLVD NE	75	50	25	67%
1041311	6/27/2020	RUNNING BEAR AVE SE & WHITE DOVE ST SE	935	-	935	0%
1259702	10/6/2020	5022 ARROYO CHAMISA RD NE	1475	1475	-	100%
1274518	10/12/2020	4300 PROSPECT AVE NE	100	100	-	100%
1373373	11/26/2020	425 LOUISIANA BLVD SE	25	25	-	100%
1394696	12/16/2020	5551 MIDWAY PARK PL NE	100	100	-	100%
Grand Total			21,594	11,755	9,864	54%



Albuquerque Bernalillo County Water Utility Authority

NEWS RELEASE

In Time for Thanksgiving: Water Authority Resumes its War on Grease

Contact: David Morris, 264-5691

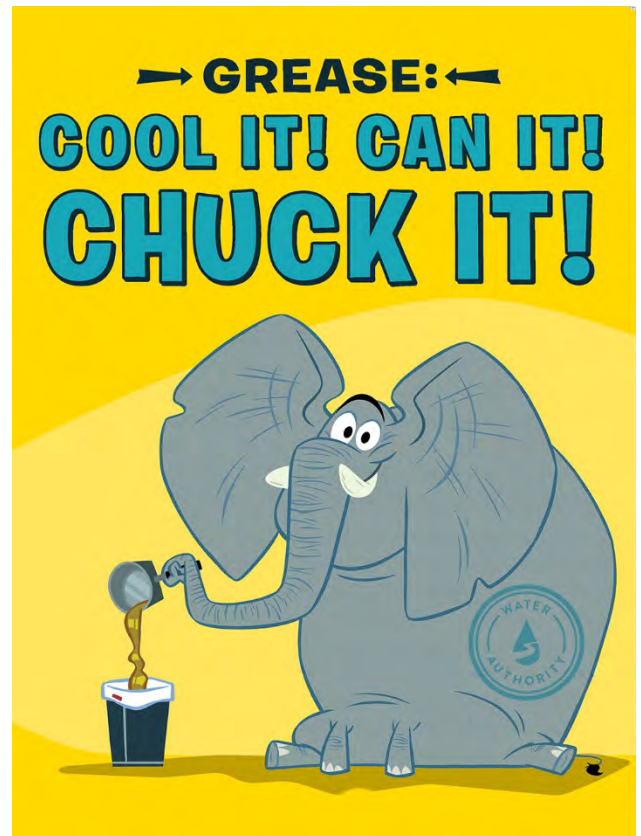
ALBUQUERQUE, November 17 – Just in time for Thanksgiving, the Water Authority has re-launched its PSA campaign to remind customers not to dispose of cooking grease in the sewer system. Billboards and TV and radio spots resurrect last year's "spokes-elephant," who points out that it makes as much sense to put a pachyderm down the sink as it does to pour grease down the drain.

FOG – Fats, Oils, and Grease – is a leading cause of sewer overflows, which in turn can cause thousands of dollars in property damage and create a public health threat. Water Authority customers are asked to do their part to prevent costly and hazardous sewer overflows:

1) Dispose of cooking grease in the trash, not the sink. Kitchen grease should be poured into a can or milk carton or soaked up with a paper towel and thrown into the garbage for disposal at the landfill. Otherwise it can collect and harden in the sewer system. For the same reason, greasy food scraps should be thrown away, not put in the garbage disposer. Remember: Cool it, Can it, Chuck it!

2) Don't put rags or disposable wipes down the sink or toilet. Rags of any sort—even ones advertising themselves as "flushable"—can cause sewer blockages, especially if they get caught on tree roots. Rags and disposable wipes should be thrown into the garbage for disposal at the landfill.

3) Plant trees well away from sewer lines. Roots grow toward breaks and cracks in sewer lines in search of water. Once they've penetrated a pipe, the roots can cause blockages leading to sewer overflows.

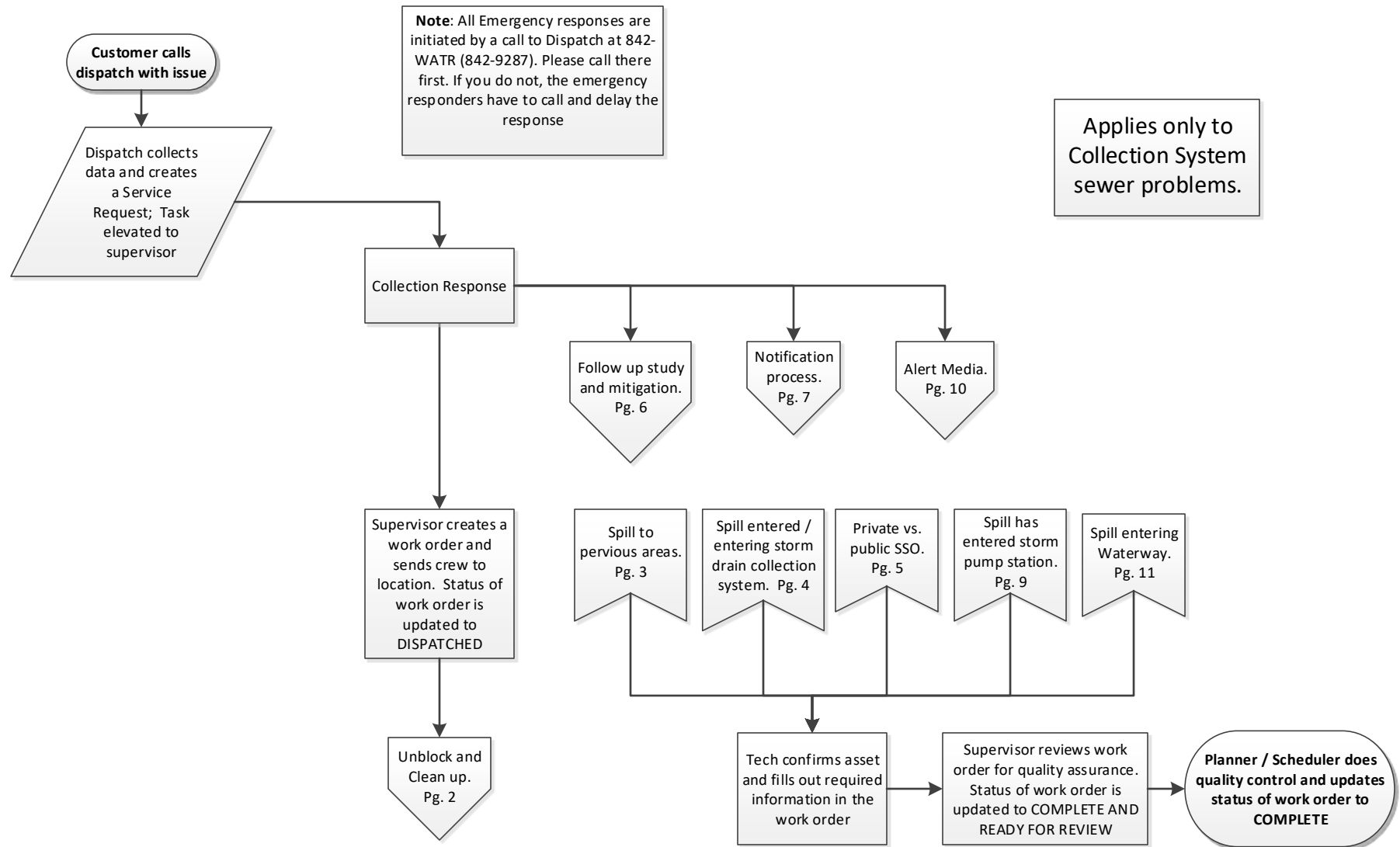


Appendix 4 Overflow Emergency Response Plan (OERP)

Overflow Emergency Response Plan

12-1-2019

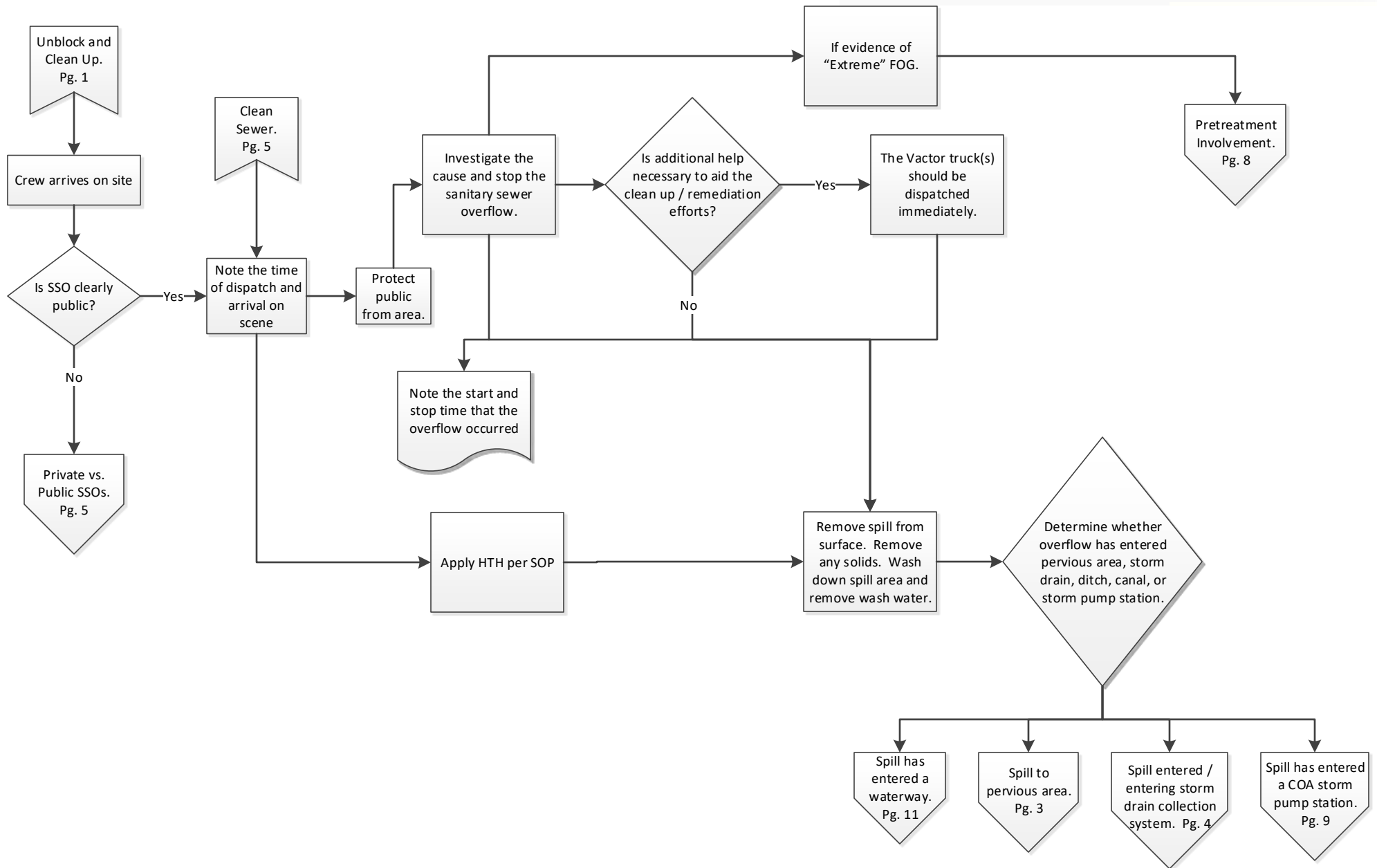
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

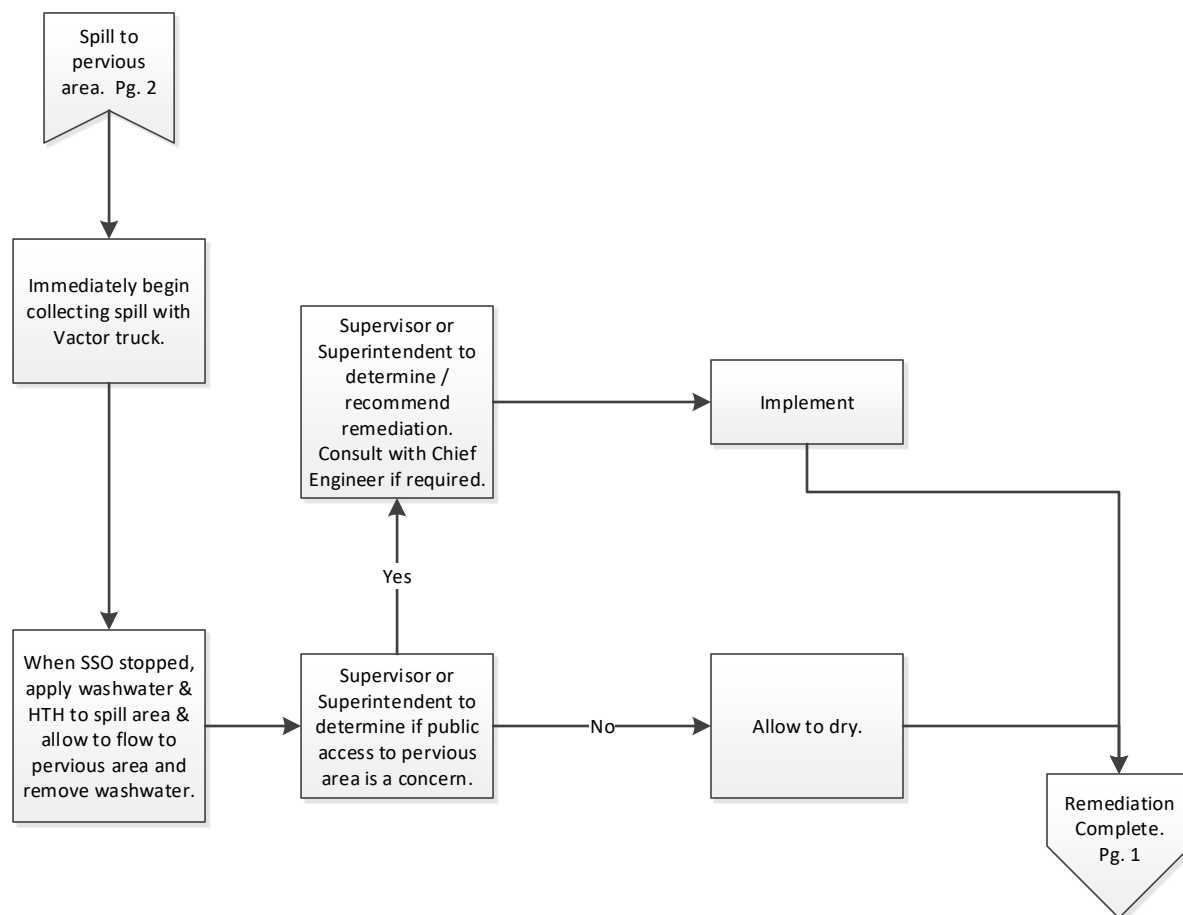
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

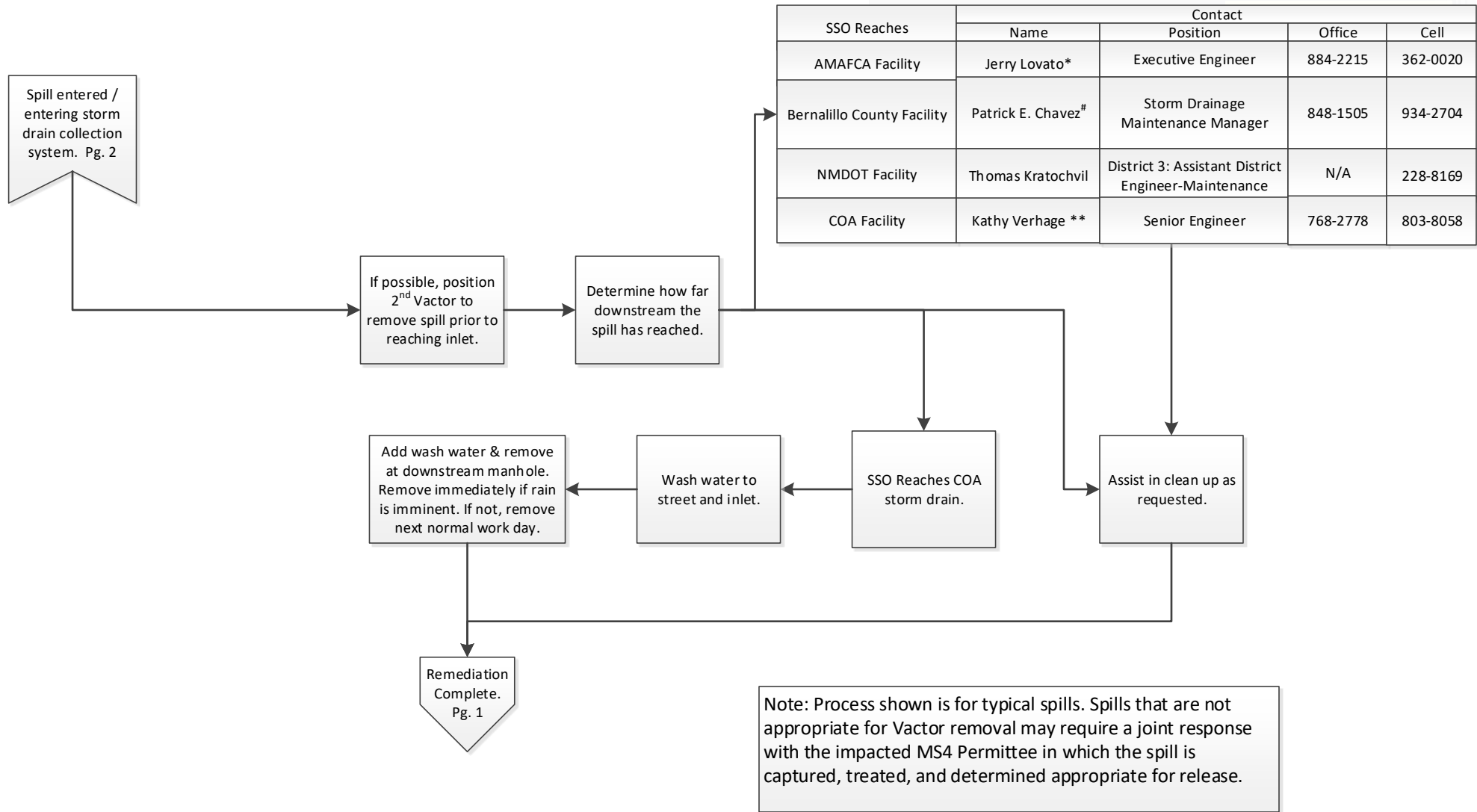
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority



*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

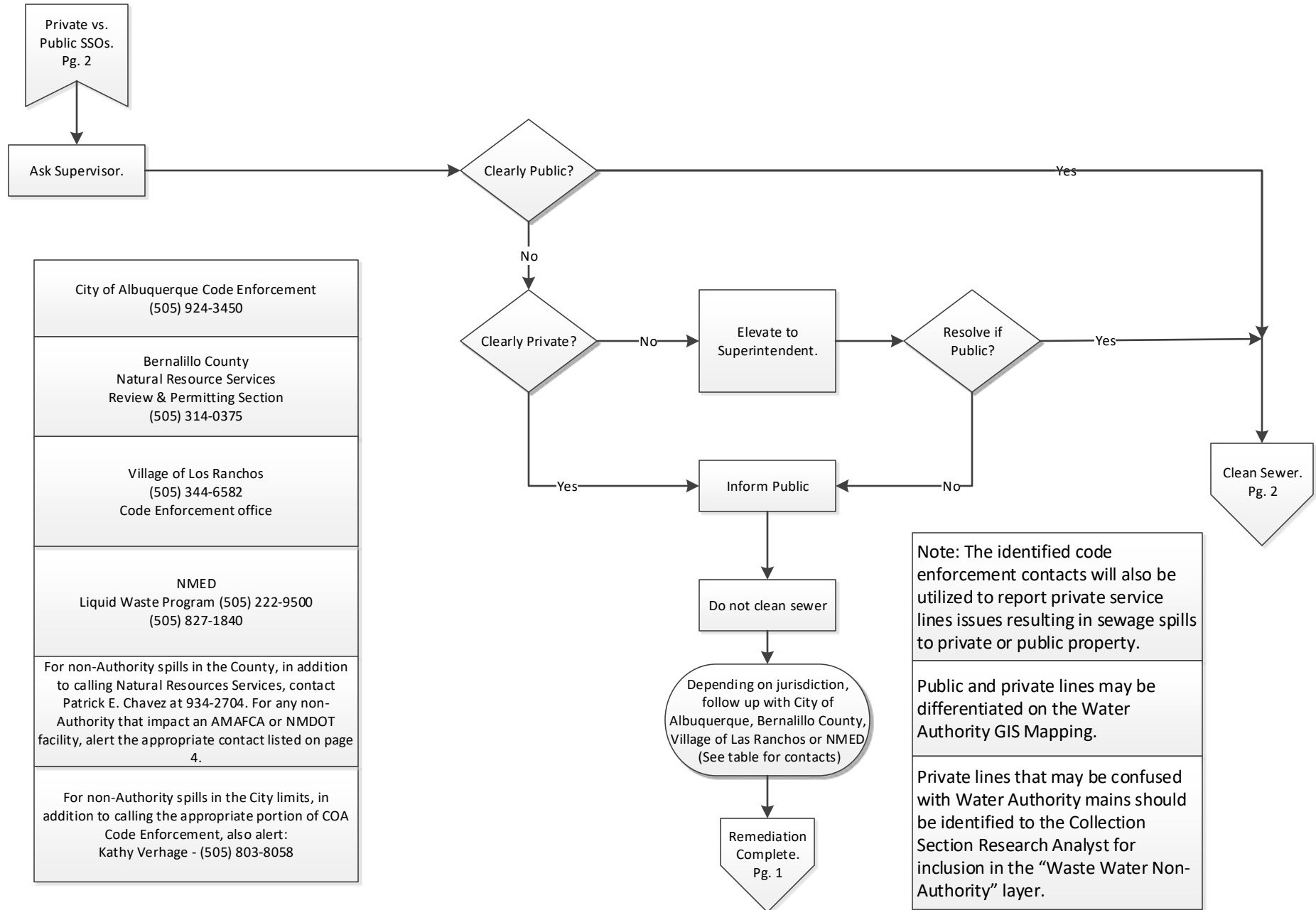
[#]If Patrick E. Chavez is not immediately available, call:

Kali Bronson: Stormwater Program Compliance Manager (505) 401-1779

Overflow Emergency Response Plan

12-1-2019

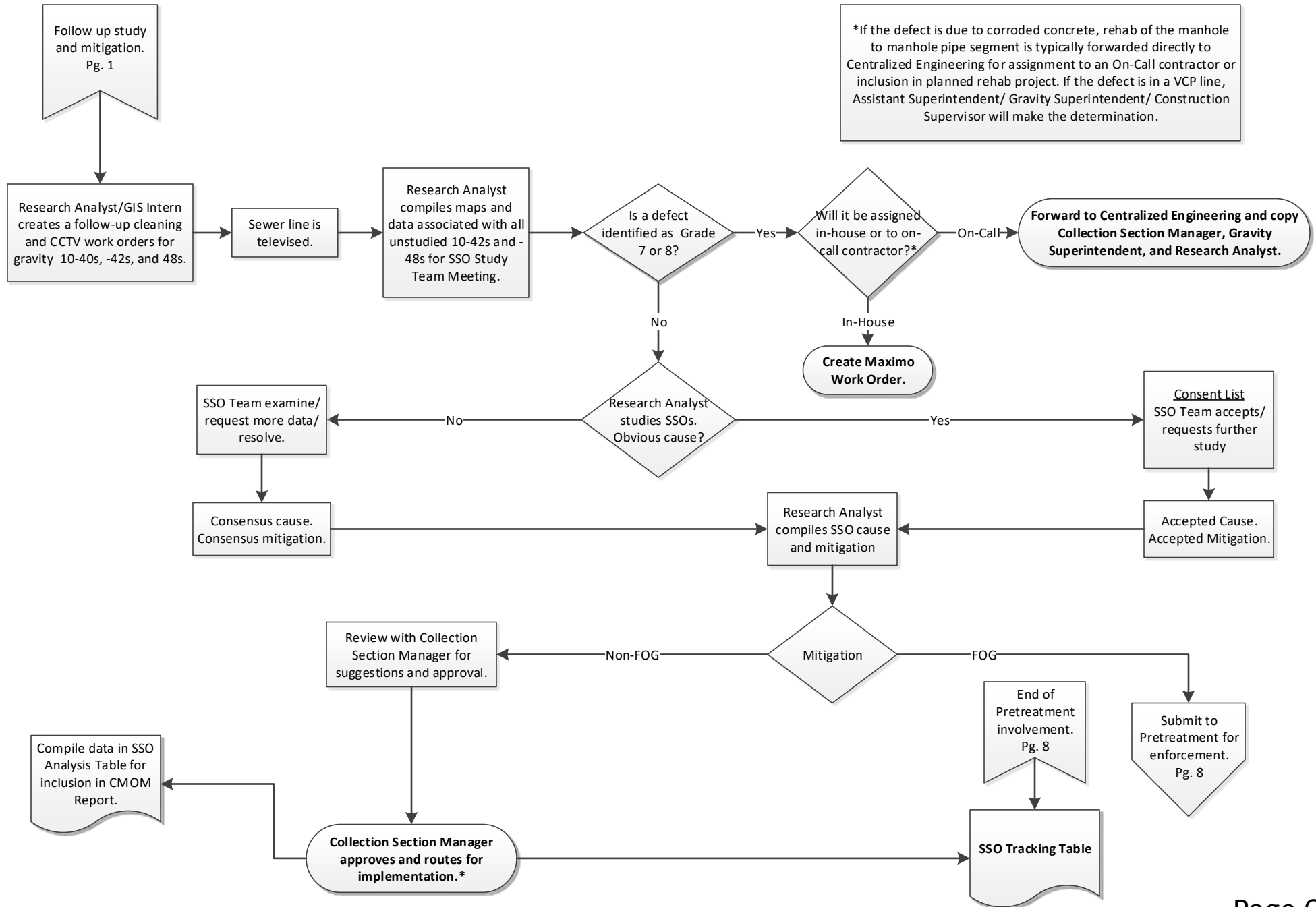
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

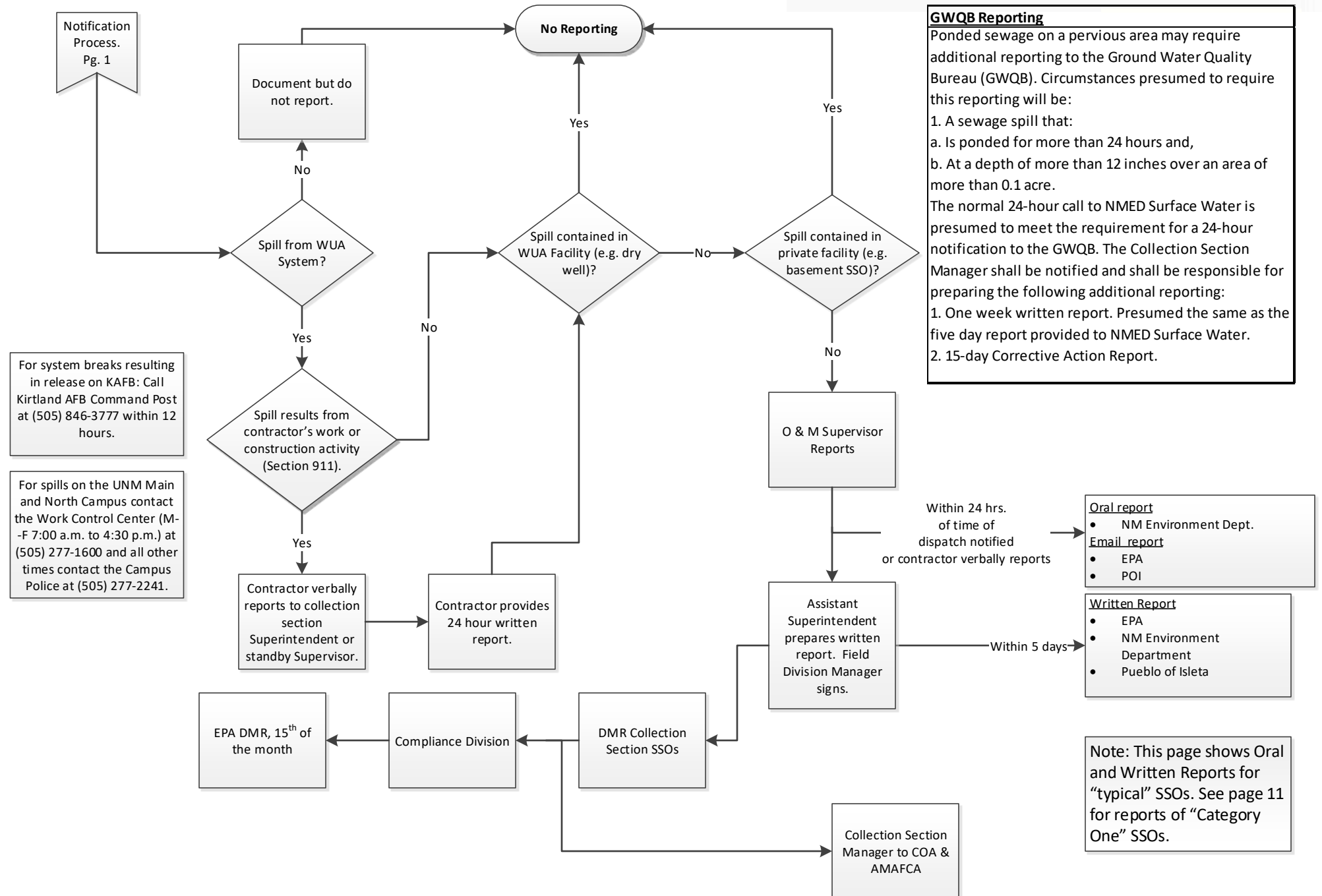
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

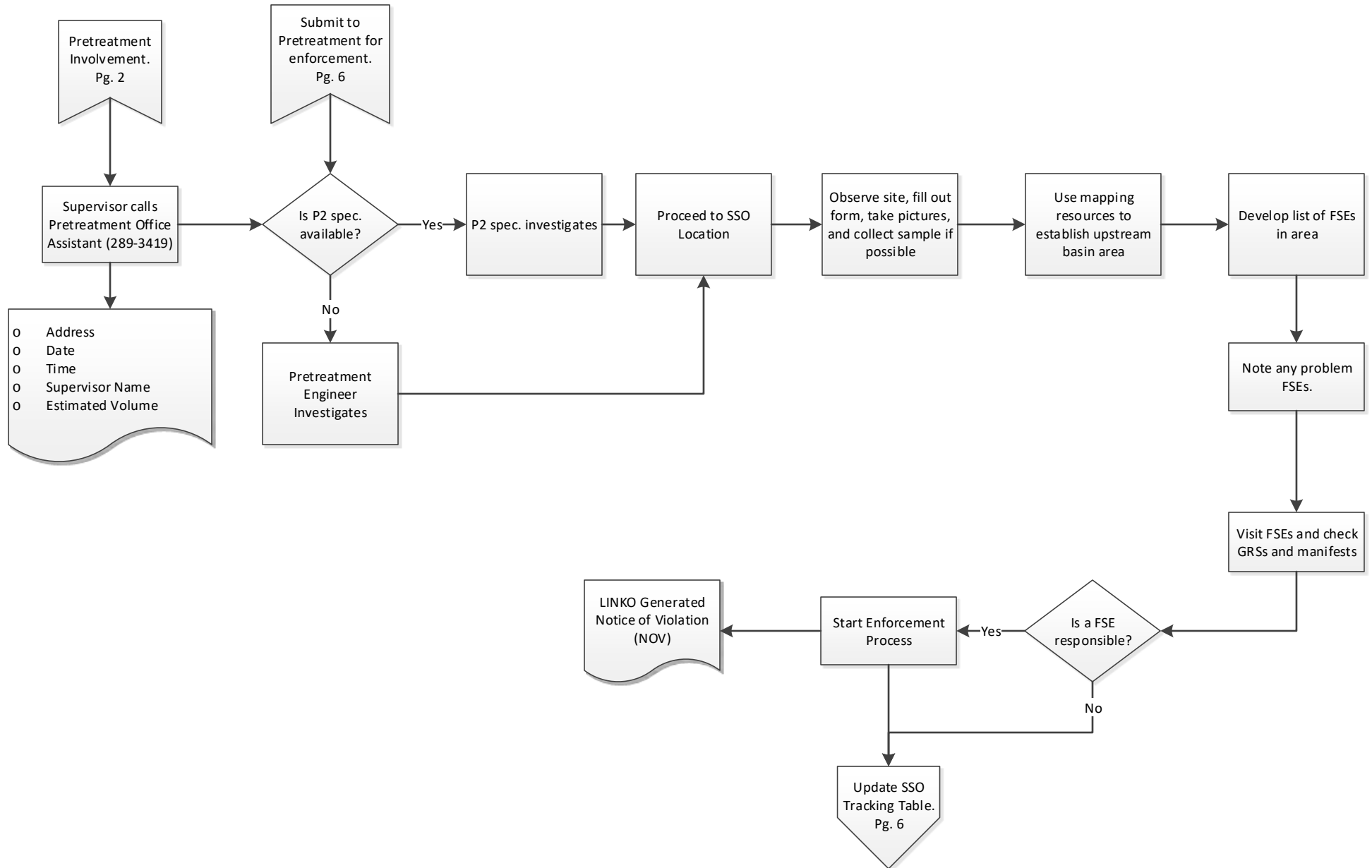
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

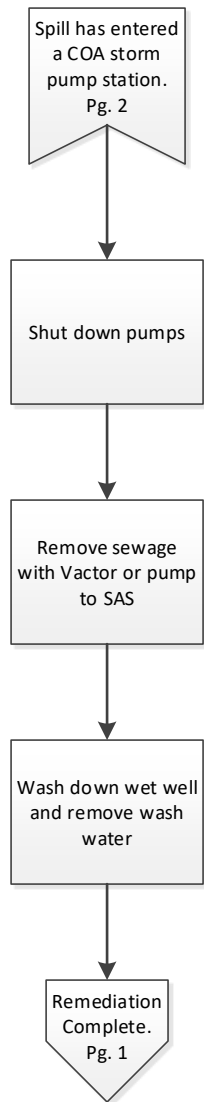
Albuquerque Bernalillo County Water Utility Authority



Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority

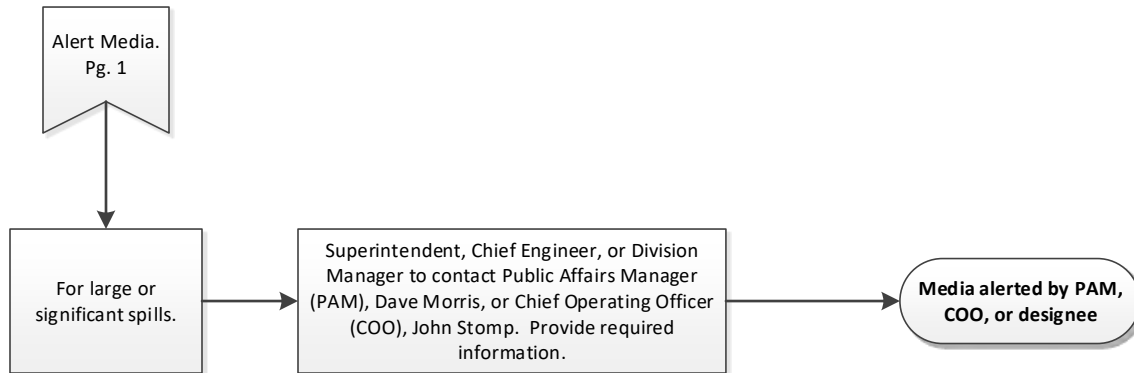


Note: Process shown is for typical spills. Some spills may require a joint response with the City of Albuquerque in which the spill is captured, treated, and determined appropriate for release.

Overflow Emergency Response Plan

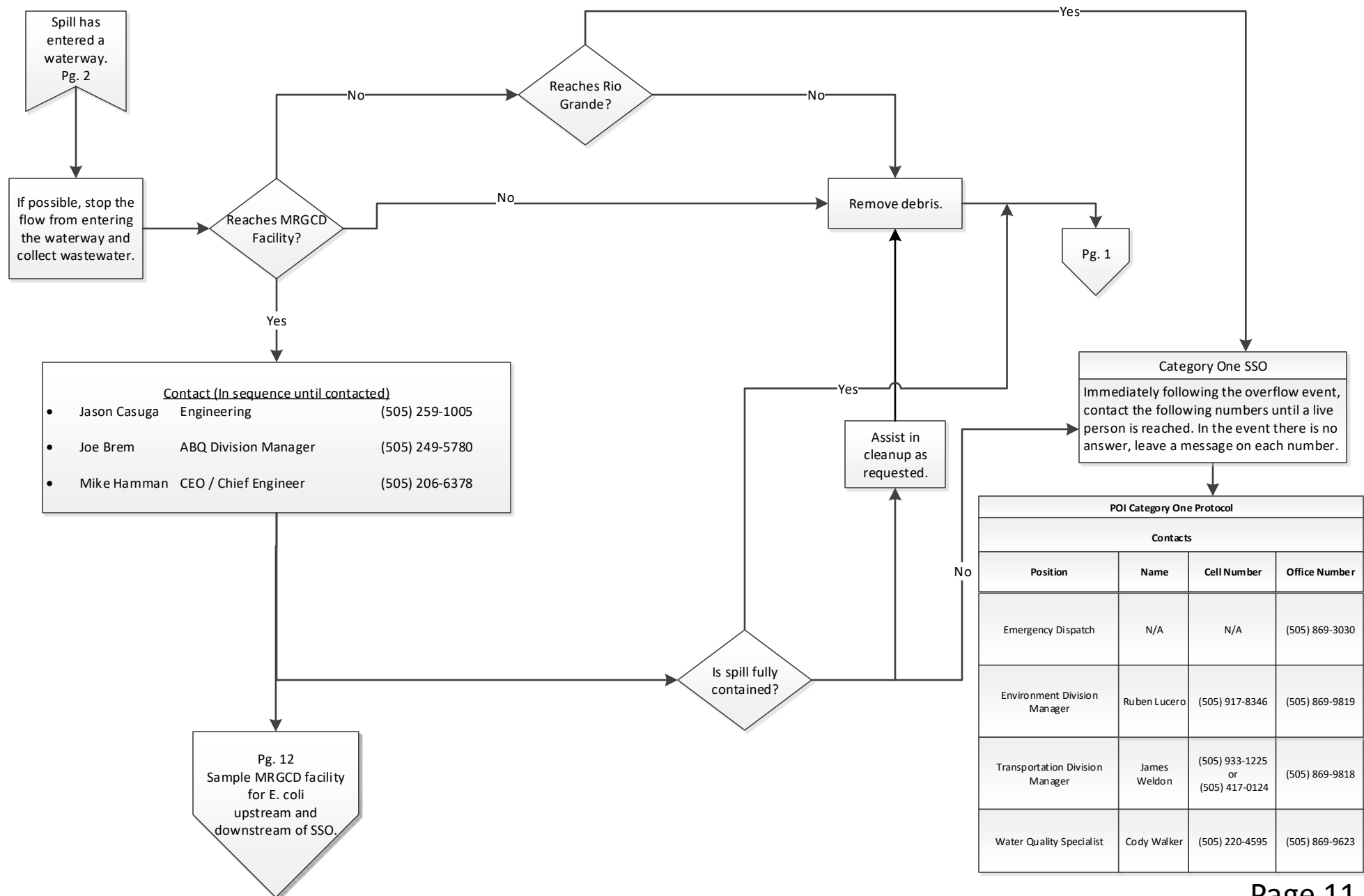
12-1-2019

Albuquerque Bernalillo County Water Utility Authority



Albuquerque Bernalillo County Water Utility Authority

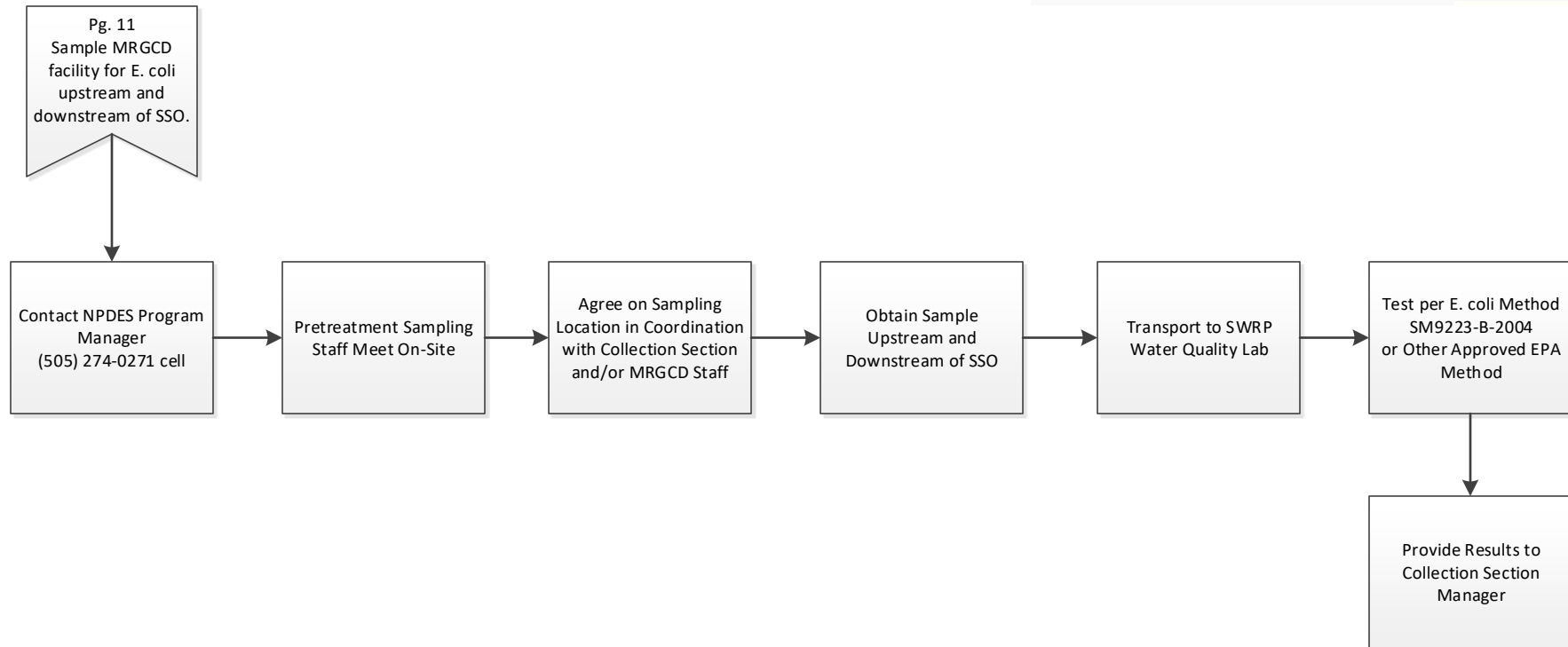
Page 11



Overflow Emergency Response Plan

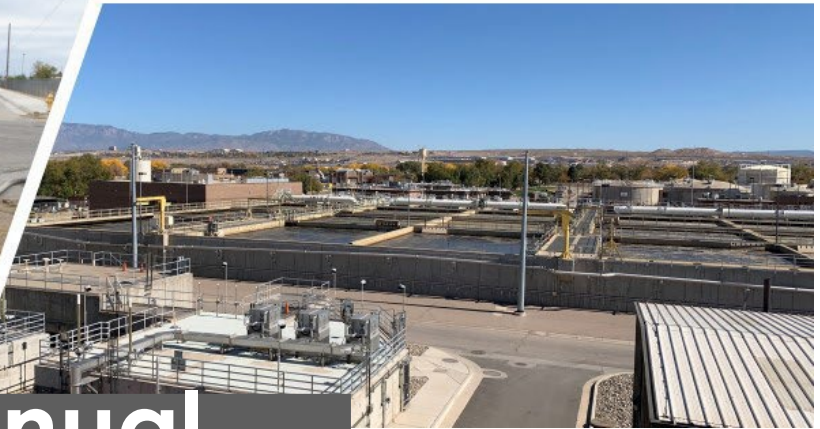
12-1-2019

Albuquerque Bernalillo County Water Utility Authority



Appendix 5 Goal Summary - CY2020 Report

Goal Summary - CY2020 CMOM Report		
Goal	Timing	Page # for Discussion
CCTV all gravity pipes suffering a blockage. For all SSOs, determine a cause and mitigation and report in the next CMOM report	Annually	6
Interceptor manhole inspection for an additional 260 manholes	CY2021	11
Public advertising	On-Going	11
Distribute FSE fliers in all languages and improve FOG inspections	CY2023	11
Update OERP	As required	12
CCTV a portion of system	Ten Year goal. Report annually.	13
Clean a portion of the system	Ten Year goal. Report annually.	14
Force main inspection program	Annually	15
Perform an air pocket profile, utilizing a smart ball, of Lift Station 20's north and south force main. Install replacement ARVs on north and south force main.	CY2021	15
SSOs: Decrease number and mitigate impact	On-Going	16



CMOM Annual Report 2021



Contents

Capacity, Management, Operations and Maintenance (CMOM) Plan Overview	2
Report Purpose	2
Permit Requirements	3
CMOM Program Self-Assessment	3
FOG Policy	4
FOG Enforcement	5
SSO Analyses	6
Permit Requirements	6
SSO Study Team	6
Table 1 Sewer Trouble Definitions	7
Causes & Mitigations	8
SSO Tabulation & Analysis	9
Volume Spilled and Recovered	11
Actions Implemented and On-Going Programs	12
General	12
FOG Policy Implementation	13
Overflow Emergency Response Plan (OERP)	13
Closed Circuit Television (CCTV)	14
Cleaning Program Goal	15
Force Main Inspection Program	16
Odor Complaints	16
Identified Gaps in the Water Authority Processes with Recommendation to Close	17
Prohibited Discharges, i.e., SSOs	17
Appendices	18
Appendix 1 Sanitary Sewer Overflow Analysis Table	19
Appendix 2 Sanitary Sewer Overflow Volume Captured Analysis Table	21
Appendix 3 FOG Advertising Campaign	22
Appendix 4 Overflow Emergency Response Plan (OERP)	25
Appendix 5 Goal Summary - CY2021 Report	26

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 CY2021 CMOM Annual Report follows previous FY2013-17 and CY2017-20 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 CY2021 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 were 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://mwrdr.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 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 Removal System (GRS) functionality, pumping schedule, maintenance, and recordkeeping are identified. The FOG policy explains the Water Authority use of the 25% solids and grease rule (25 Percent Rule) to determine if a GRS is filled to capacity. The policy also contains Best Management Practices (BMPs) such as scraping plates, using screens, and not using emulsifiers, etc.

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

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

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

In developing the FOG Policy, the Water Authority held a meeting with the hauled wastewater permit holders on July 22, 2013 and a public meeting on July 25, 2013 to discuss the proposed Policy. The final FOG Policy was submitted to the EPA on September 27, 2013 and updated in the Pretreatment Program modification documents sent to EPA on June 2, 2014. No comments from EPA were received regarding either submission, thus indicating approval. 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 December 2022.

FOG Enforcement

In CY2021, the Water Authority Pretreatment Program had 1,718 compliant FSEs out of 2,135 FSE sites for a compliance rate of 80%. Three hundred-sixty-seven (367) FSE inspections were conducted with 222 passing, and 145 failing. Of the 145 failed inspections, 77 Notices of Violation were issued. Thirty-three (33) of the 77 violations were resolved and the remainder are outstanding.

In response to SSOs, twelve (12) FSE inspections were conducted with five (5) passing and seven (7) failing. Of the seven (7) failed inspections, zero (0) Notice of Violations were issued and all were corrected before issuance of violations.

In addition, Water Authority Pretreatment personnel distributed FOG brochures to FSEs, single-family residences and apartment complexes upstream of the SSOs.

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

SSO Analyses

Permit Requirements

The Permit requires a CMOM Plan. 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

Sewer Trouble Definitions		
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 2 Types of Causes for SSOs

Cause(s) of SSO from DMR		Causes determined from CCTV
CO - Construction	DB - Debris	SC - Surcharged
CU -Cause Unknown	RK -Rocks	SL - Sag in Line
EQ - Equipment Failure	GR - Grease	IT - Intruding Tap
SGG -Sand, grit or gravel	RT - Roots	MH - Manhole
LF - Line Failure	RN - Rainfall	OJ - Offset Joint
V - Vandalism	RGS -Rags	
RGR - Roots / Grease	BP -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 CY2021.** (Note: Percentages may not add up to 100%, as they are rounded to the nearest percent.)

Table 3 Summary of Causes from SSO Study

10-42,10-48 Causes	Total	% of Total
Burp	2	11%
Construction	0	0%
Debris	0	0%
Grease	2	11%
Grease/Rags	2	11%
Grease/Sag in Line	0	0%
Line Failure	1	6%
Manhole	1	6%
Roots/Grease	1	6%
Roots	4	22%
Sag in Line	2	11%
Vandalism	1	6%
Equipment Failure	2	11%
Grand Total	18	100%

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 4 Summary Mitigations from SSO Study

10-42, 10-48 Mitigations	Total	% of Total
No Follow Up Needed	1	6%
Pretreatment Notified/Short Interval	1	6%
Rehab/Replace	4	22%
Short Interval	5	28%
Short Interval/Rehab/Replace	1	6%
Short Interval/Special Instructions	4	22%
Special Instructions	2	11%
Grand Total	18	100%

SSO Tabulation & Analysis

Figure 1 shows the cumulative 10-42s by month for CY2012-21.

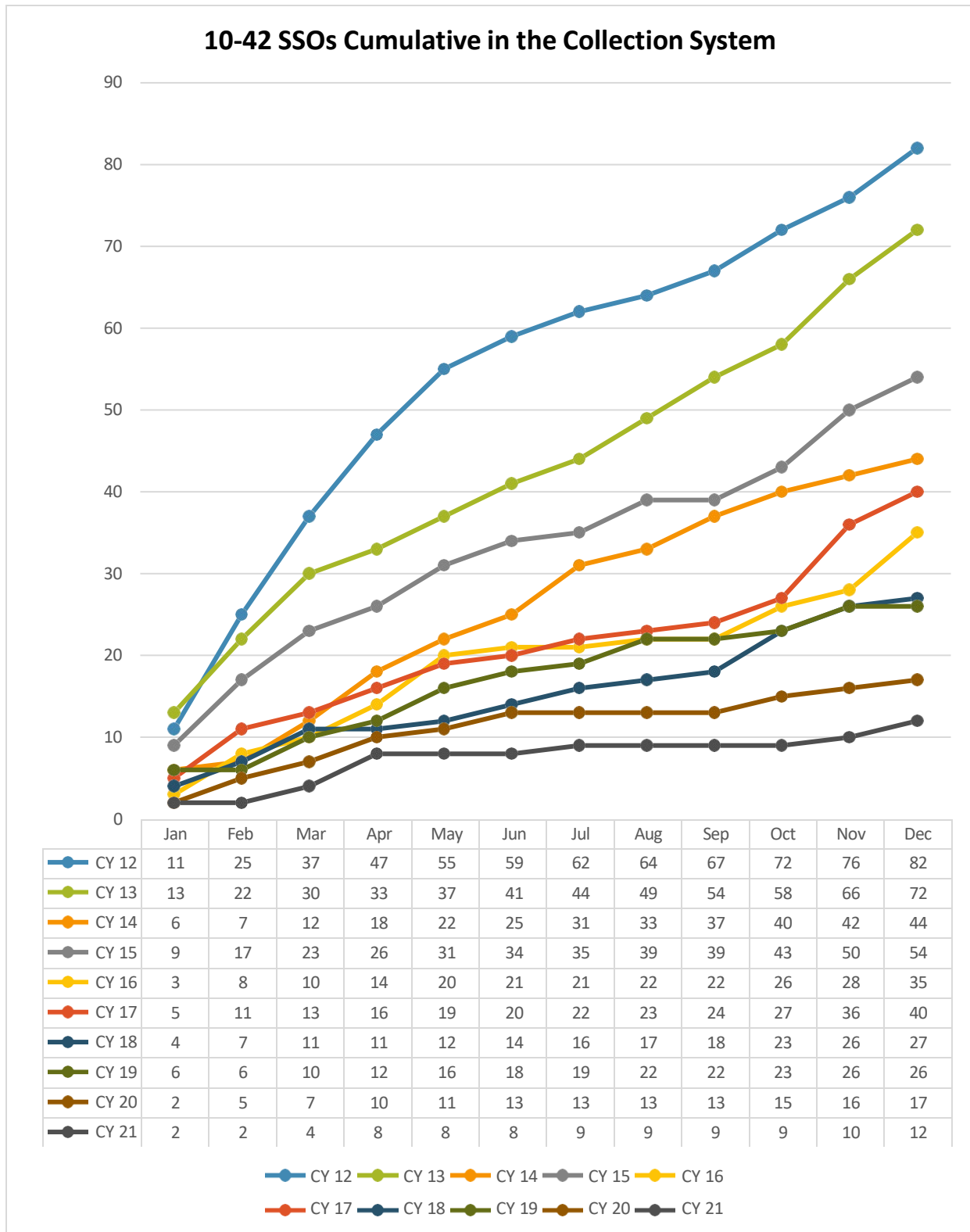


Figure 1 Reportable SSOs

Appendix 1 contains a list of every 10-42 and 10-48 event in CY2021. 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 and 0.5 for CY2012-21 respectively.

Figure 2 shows the total sewer troubles, i.e. 10-40s, -42s, and -48s by year for CY2012-21. This graph does not include 10-48s due to “burps” which are not due to a blockage or other failure resulting in the overflow of sewage. Instead, air displaced during the Vactor jetting cleaning can under certain circumstances force out the water in the home fixture P-traps, e.g. toilets and sinks. These sometimes result in claims and are therefore included in the Property Damage totals for completeness and consistency. There were only two burps during CY 2021. These burps are identified in Appendix 1.

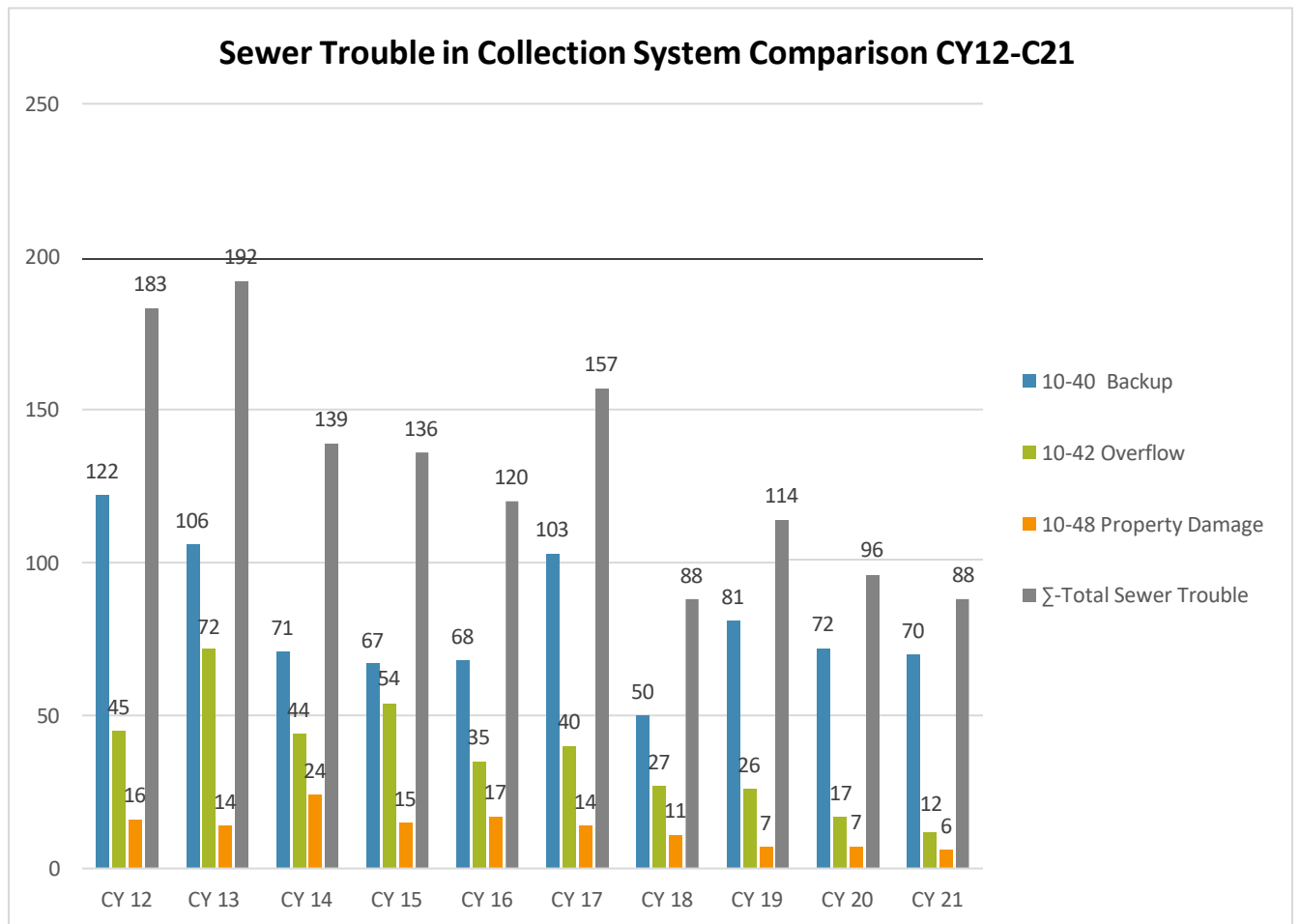


Figure 2 Sewer Trouble Comparison

Volume Spilled and Recovered

Via the OERP, the Water Authority has implemented a policy of capturing spills and documenting actions. Appendix 1 provides the Ultimate Discharge Location for each reported SSO. Appendix 2 provides estimated spill volumes and volumes recovered for 12 reported SSOs for CY2021. Of the spill volume estimated not to be recovered, none were identified as directly reaching the Rio Grande. No spills reached a facility operated by the MRGCD. It was estimated that approximately 83% of the estimated spill volume was recovered in CY2021 as shown in Appendix 2.

Actions Implemented and On-Going Programs

General

Below are gaps that were identified in the CY2020 CMOM Report and were closed in CY2021, or are on-going programs, or both. In addition to the commitments made in the CMOM Report, in CY2021, the following additional actions were taken to expand the Water Authority's ability to operate and maintain the system.

1. Interceptor manhole inspection was performed on 260 additional manholes for a total of 360 manholes inspected from CY2020 and CY2021. The data is being used for an Interceptor Manhole Asset Management Plan to determine which manholes should be prioritized for rehabilitation or replacement.
2. The Water Authority updated the public website (<https://www.abcwua.org/sewer-collection-section/>) to provide more information about the Collection Section and make the website more user friendly. The "Keeping Elephants Out of Sewer Game," created by Stephanie Ramsey, Ph. D., was added to the website as a tool to teach the public how to prevent SSOs.
3. The Water Authority's Public Affairs section continued to support SSO prevention efforts and the FOG Policy in CY2021. Appendix 3 identifies media specifics for water bill inserts, social media, and advertising in television, radio, newspaper, outdoor boards, and digital.
4. On April 7, 2021, Collection Section staff met virtually with the North and South Divisions of LA Sanitation and Environment - Clean Water Conveyance. During the meeting, operating and management staff discussed cleaning methods and working in traffic conditions.

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 a goal was set to develop an FSE flier in Chinese. However, it was determined that a Vietnamese flier was more prudent and this was developed in CY2020. The Water Authority has a three-year plan to distribute these fliers to all FSEs and residential units during SSO investigations to continually improve education to the rate payers on the negative impacts of FOG. In CY2022, improve FOG inspections by using advance inspection tools.

Overflow Emergency Response Plan (OERP)

This is an on-going program to update the OERP as required. In CY2020 and CY2021, no modifications 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 CY2019. The most current version of the OERP is posted to http://www.abcwua.org/Sewer_System.aspx

The Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA) and the Water Authority continued coordination in 2021. On April 4, 2021, both organizations participated in a virtual brainstorming meeting. Discussion included improvements in capturing and removing spills prior to reaching the Rio Grande.

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 CY2021. The CY2021 portion of this recommendation is complete. The CCTV program will continue. Anticipated schedule:

1. FY21: 5% of the small diameter.
2. FY22: 5% of the small diameter.
3. FY23: Large diameter unlined concrete pipe.
4. FY24: 5% of the small diameter.
5. FY25: 5% of the small diameter.
6. FY26: 5% of the small diameter.

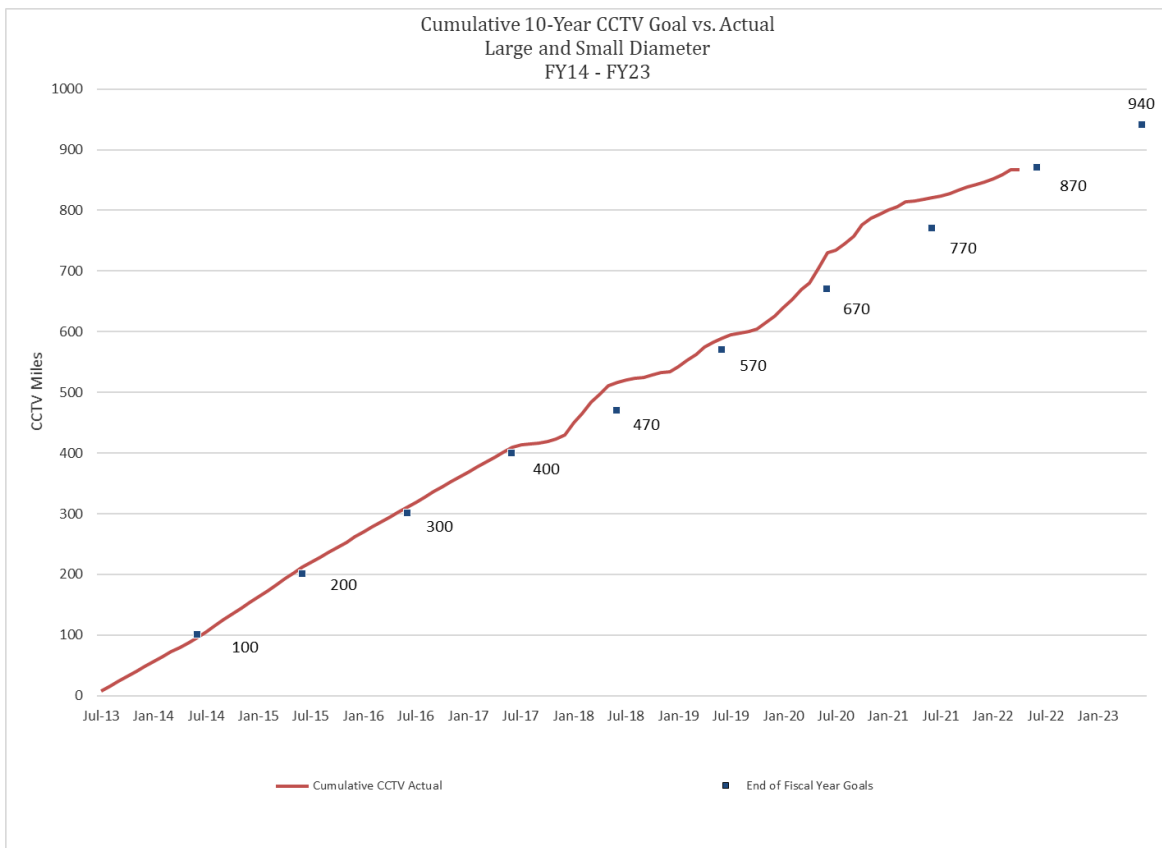


Figure 3 Small Diameter Sewer CCTV'd vs. Ten-Year Goal

Cleaning Program Goal

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

CMOM Report figures for cleaning and CCTV will continue showing fiscal year (FY) goals in accordance with funding and contracting cycles and actual metrics will reflect work through the end of the calendar year (CY). As shown Figure 4, the Water Authority is ahead of its goal to clean the entire system once in ten years through the Sub-Basin program.

The Water Authority has performed detailed analyses of SSO rates in the Water Authority collection system. These analyses show that:

1. The 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. This is because the additional cleaning would be applied to lines more likely to spill, and to be taken from lines less likely to spill.
2. The upstream portion of the Sub-Basin lines are less likely to spill than the downstream portion.

These findings provide the opportunity to clean the sewers more effectively and efficiently with the goal of SSO reduction, therefore, in CY2022:

1. The Water Authority will establish and monitor a temporary goal of cleaning all gravity small diameter lines every fifteen 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. This will maintain the Sub-Basin program as currently configured while targeting the Short Interval lines which are more likely to spill.
2. The Water Authority will continue studies with the intent is to validate prior study indicating a significant SSO Rate variation for top versus bottom, and therefore the opportunity to optimize sub-basin cleaning. A possible outcome will be modification of the Sub-Basin program to remove lines shown to be significantly less likely to spill.



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.

Lift Station 20 pumps westside flow to the Southside Water Reclamation Plant (SWRP) via twin 30" ductile iron force mains. In CY2021, the Water Authority performed a test using the smart ball and installed replacement ARVs on both force mains.

Odor Complaints

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

Identified Gaps in the Water Authority Processes with Recommendation to Close

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

Prohibited Discharges, i.e., SSOs

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

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

Appendices

Appendix 1 Sanitary Sewer Overflow Analysis Table

Type			DMR														SSO Team Study		Enforcement		
10-42	10-48	10-42 & 10-48	Maximo WO #	Diameter	Repeat	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		1411937	8	Y	N	1/5/2021	8:00 AM	:45	7809 BELLAMAH AVE NE	NA	BP	NA	CC/IN	NA	NA	BP	SP			
X			1426602	8	N	N	1/22/2021	8:55 AM	:35	1228 DEL MASTRO DR SW	700	GR/RGS	NEAH	CC/HTH/WD	PST	600	MH	RH			
X			1428140	NA	N	N	1/23/2021	5:27 PM	2:18	COORS BLVD SW & PAJARITO RD SW	100	CONTROLLER	NEAH	CNTRLR/SSS/CV/ET /PO/RPLC/HTH	PST	0	EQ	RPLC			
	X		1483611	8	N	N	3/8/2021	11:41 AM	0:49	1843 CAGUA PL NE	NA	RGS	NA	CC	NA	NA	RT	SI			
X			1479870	8	N	N	3/5/2021	9:57 AM	0:18	3528 CAMPBELL FARM LN NW	55	GR/RGS	NEAH	CC/HTH/WD/RP	O	55	GR/RGS	RH/SL			
X			1491553	8	N	N	3/17/2021	12:25 PM	0:55	4001 PRINCE ST SE	275	RGS	NEAH	CC/HTH/CWW/WD	PST	275	EQ	RH			
X			1507479	8	N	N	4/3/2021	7:07 PM	3:53	13004 GLENWOOD HILLS CT NE	50	RGR	NEAH	CC/HTH/RS/WD	AD	0	RGR	SI			
X			1516878	12	N	N	4/10/2021	8:25 AM	1:52	6200 INDIAN SCHOOL RD NE	5600	DB/V	NEAH	CC/HTH/PO/CWW/R S/WD	AC	5600	V	NF			
X			1523300	8	Y	N	4/17/2021	2:59 PM	0:44	DON LUIS RD SW	220	GR/RGS	NEAH	CC/HTH/CWW/RP/ WD	STD	110	LF	RH			
X			1525858	8	N	N	4/20/2021	6:55 PM	0:20	4401 4TH ST NW	100	GR	NEAH	CC/WD	PST	0	GR	PT/SL	x	3	2
X			1633951	12	N	N	7/31/2021	1:09 PM	2:41	7228 VALLE JARDIN LA NW	800	GR/RGS	NEAH	CC/HTH	SD	800	GR/RGS	SI			
	X		1635825	8	N	N	8/2/2021	1:25 PM	:40	6108 BANCROFT CT NE	NA	RGS/RT	NA	CC/HTH	NA	NA	RT	SI/SP			
	X		1760532	8	N	N	11/16/2021	7:00 PM	0:30	2900 EL CORTO DR SW	NA	BP	NA	CC	NA	NA	BP	SP			
X			1760997	8	N	N	11/18/2021	8:21 AM	1:00	MARLA DR NE & MONTGOMERY BLVD NE	1500	RGS	NEAH	CC/HTH/RS/WD	SD	500	RT	SI/SP			
	X		1783146	8	Y	Y	12/6/2021	12:23 AM	0:17	1600 GONZALES RD SW	NA	GR	NA	CC	NA	NA	SL	SI			
X			1799077	8	N	N	12/18/2021	11:00 AM	0:50	7900 SAN PEDRO DR NE	3100	GR/RGS	NEAH	CC/HTH/PO/RP/WD/ ET	AC	2500	GR	SI/SP	x		
	X		1801711	8	N	N	12/20/2021	8:00 AM	0:30	620 13TH ST NW	NA	GR	NA	CC	NA	NA	SL	SI			
X			1814119	8	N	N	12/25/2021	1:55 PM	0:20	13125 ALICE AVE NE	100	GR	NEAH	CC/HTH/WD	PST	35	RT	SI/SP			

CY2021 10-42 SPILL VOLUME AND VOLUME RECOVERED						
Maximo WO #	Date of SSO	Location	Estimated Volume (gallons)	Volume Recovered (gallons)	Volume Not Recovered	% Recovered
1426602	1/22/2021	1228 DEL MASTRO DR SW	700	600	100	86%
1428140	1/23/2021	COORS BLVD SW & PAJARITO RD SW	100	0	100	0%
1479870	3/5/2021	3528 CAMPBELL FARM LN NW	55	55	-	100%
1491553	3/17/2021	4001 PRINCE ST SE	275	275	-	100%
1507479	4/3/2021	13004 GLENWOOD HILLS CT NE	50	0	50	0%
1516878	4/10/2021	6200 INDIAN SCHOOL RD NE	5600	5600	-	100%
1523300	4/17/2021	DON LUIS RD SW	220	110	110	50%
1525858	4/20/2021	4401 4TH ST NW	100	0	100	0%
1633951	7/31/2021	7228 VALLE JARDIN LA NW	800	800	-	100%
1760997	11/18/2021	MARLA DR NE & MONTGOMERY BLVD NE	1500	500	1,000	33%
1799077	12/18/2021	7900 SAN PEDRO DR NE	3100	2500	600	81%
1814119	12/25/2021	13125 ALICE AVE NE	100	35	65	35%
Grand Total			12,600	10,475	460	83%

Appendix 3 FOG Advertising Campaign

Our CY2021 FOG advertising campaign/public outreach was supported by the following activities:

Bill Inserts (210,000 printed and distributed every month)

December 2021

November 2021

Outdoor Advertising

4 Outdoor boards running for one week from Nov. 22-28, 2021 and Dec. 20-27, 2021 reaching an estimated 1,505,201 residents (with duplication)

Newspaper Advertising

2 banners ads running in the *Albuquerque Journal* on 11/24/21 and 12/22/21 reaching an estimated 193,650 people.

2 one-quarter page ads running in The Paper on 11/24/21 and 12/22/25 reaching an estimated 20,000 people.

Television advertising

2 week schedules in November and December on KOB TV, KRQE TV and KOAT TV and selected Comcast stations reaching an estimated 998,542 people.

Digital advertising

Digital place on AdWallet in November and December targeting women 27-65 in Bernalillo County zip codes. Estimated number of people reached: 5,000

Radio advertising

Two week scheduled in November (11/15/21-11/28/21) and December (12/20/21-12/26/21) on the top 5 local stations reaching women 25-64. Estimated number of people reached: 212,872

Total number of estimated people reached (with duplications): 3,541,965

Social Media Posts – Facebook/Instagram/Nextdoor

Title		Date published	
☐	 REMEMBER...fats, oils and grease should NEVER go down the drain... waterauthorityeducation	Boost post	Dec 22, 2021
☐	 REMEMBER...fats, oils and grease should NEVER go down the drain... Albuquerque Bernalillo County Water Utility Authority	Boost post	Dec 22, 2021
☐	 It's finally here—Thanksgiving week! If you're preparing a large m... waterauthorityeducation	Boost post	Nov 23, 2021
☐	 Ad completed It's finally here—Thanksgiving week! If you're preparing a large m... Albuquerque Bernalillo County Water Utility Authority	Boost post	Nov 23, 2021
☐	 REMEMBER...fats, oils and grease should NEVER go down the drain... Albuquerque Bernalillo County Water Utility Authority	Boost post	Nov 22, 2021
☐	 REMEMBER...fats, oils and grease should NEVER go down the drain... Albuquerque Bernalillo County Water Utility Authority	Boost post	Oct 22, 2021
☐	 Labor Day Weekend is just around the corner! If you're planning t... Albuquerque Bernalillo County Water Utility Authority	Boost post	Aug 28, 2021
☐	 Our water resources are directly impacted by the choices made by... Albuquerque Bernalillo County Water Utility Authority	Boost post	May 15, 2021
☐	 We need your help to prevent backups in our sewer systems! Nev... Albuquerque Bernalillo County Water Utility Authority	Boost post	Jan 29, 2021

Data - Social Media Posts					
DATE PUBLISHED	PEOPLE REACHED	ENGAGEMENTS	LIKES AND REACTIONS	COMMENTS	SHARES
22-Dec-21	37	---	2 LIKES	0	0
22-Dec-21	214	11	8 REACTIONS	0	2
23-Nov-21	66	---	4 LIKES	0	0
23-Nov-21	1.3 K	30	8 REACTIONS	0	1
22-Nov-21	248	8	4 REACTIONS	0	2
22-Oct-21	239	6	3 REACTIONS	0	2
28-Aug-21	187	17	9 REACTIONS	1	1
15-May-21	412	23	17 REACTIONS	0	4
29-Jan-21	134	3	3 REACTIONS	0	0



Albuquerque Bernalillo County Water Utility Authority ✓

Public Affairs Manager David Morris • 24 Nov



Cool it. Can it. Chuck it! It's finally here—Thanksgiving week! If you're preparing a large meal, don't forget to properly dispose of fats, oils and grease.

Posted to **Subscribers of Albuquerque Bernalillo County Water Utility Authority**



18

· 8,213 Impressions



Like



Comment

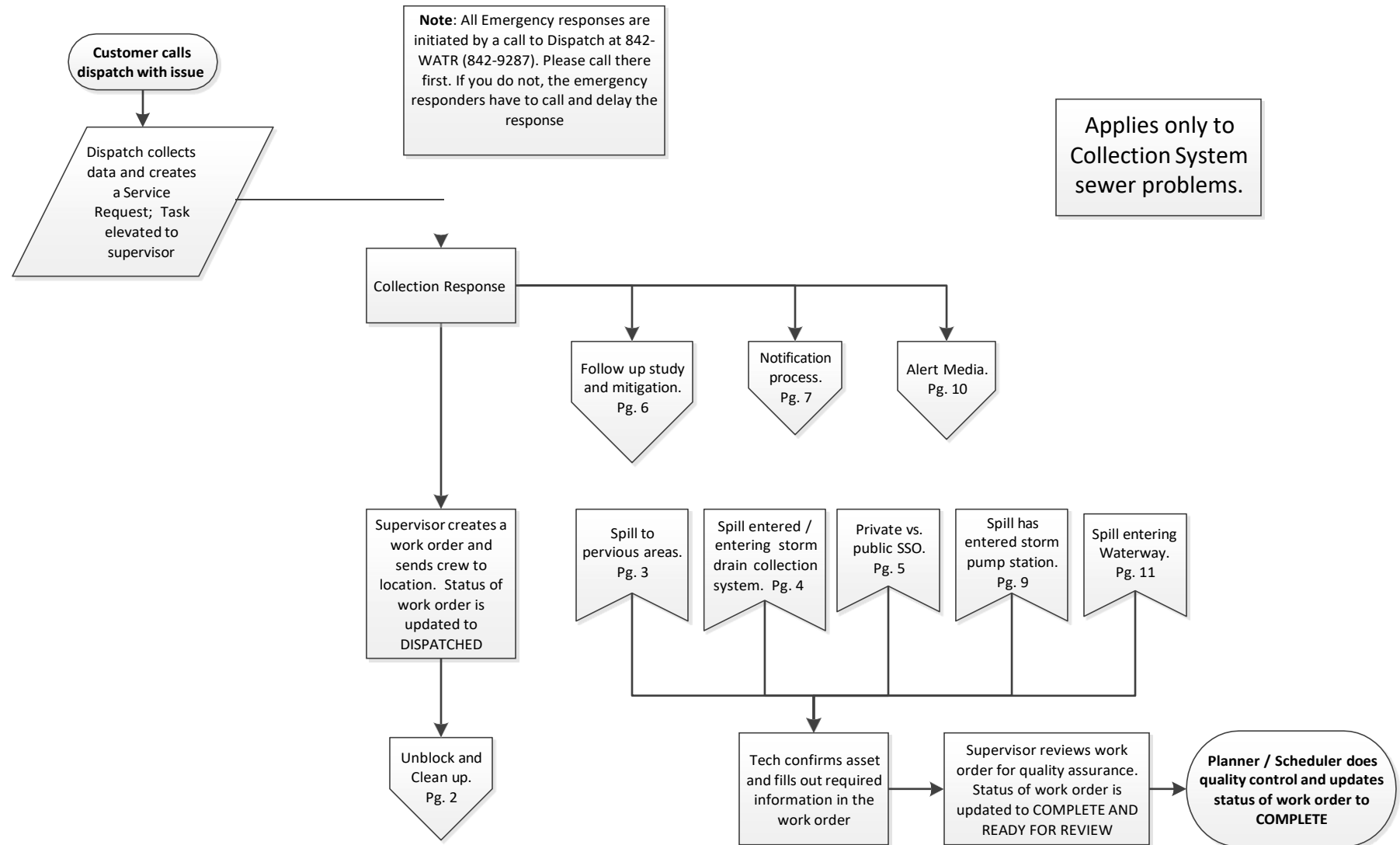


Share

Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

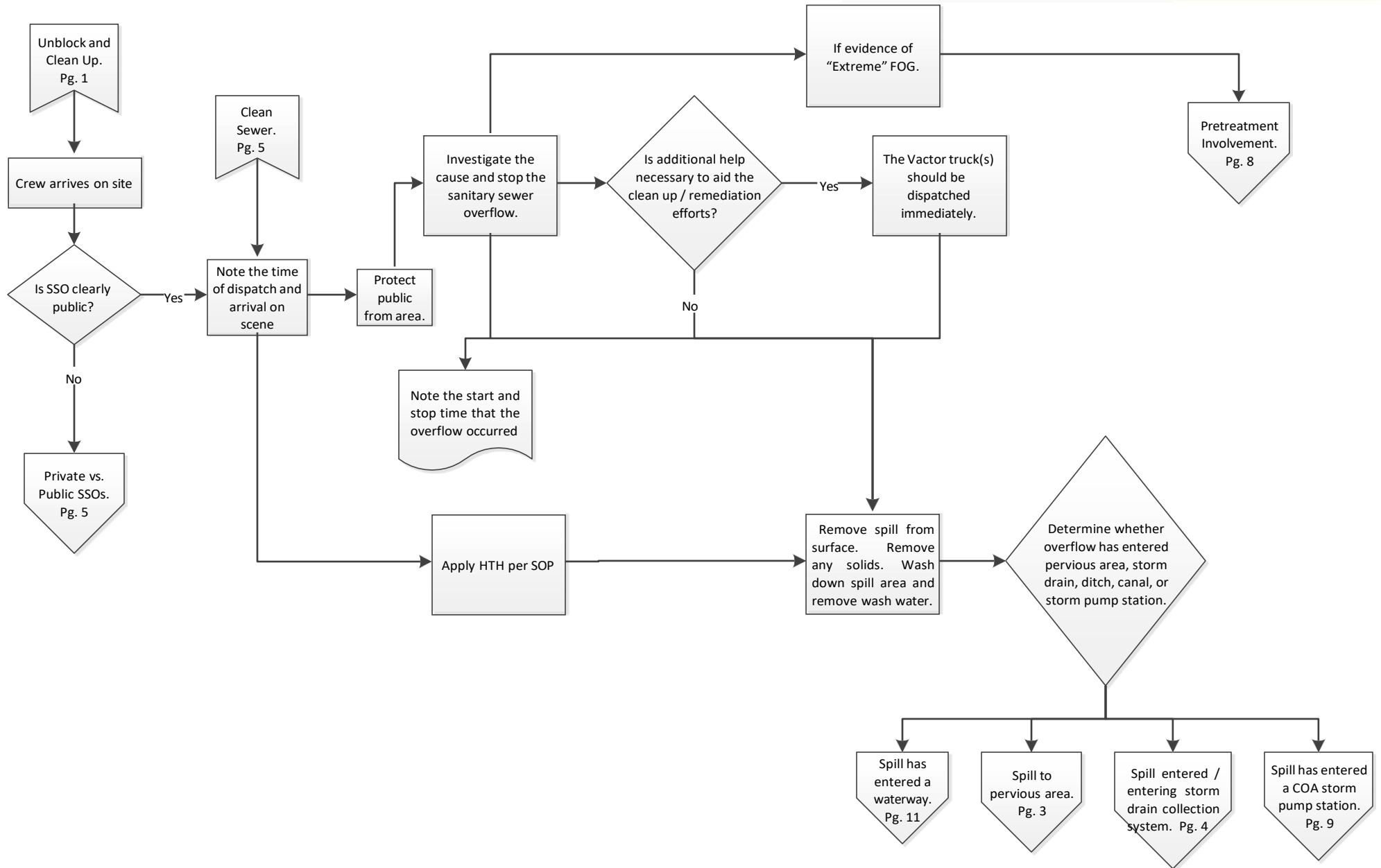
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

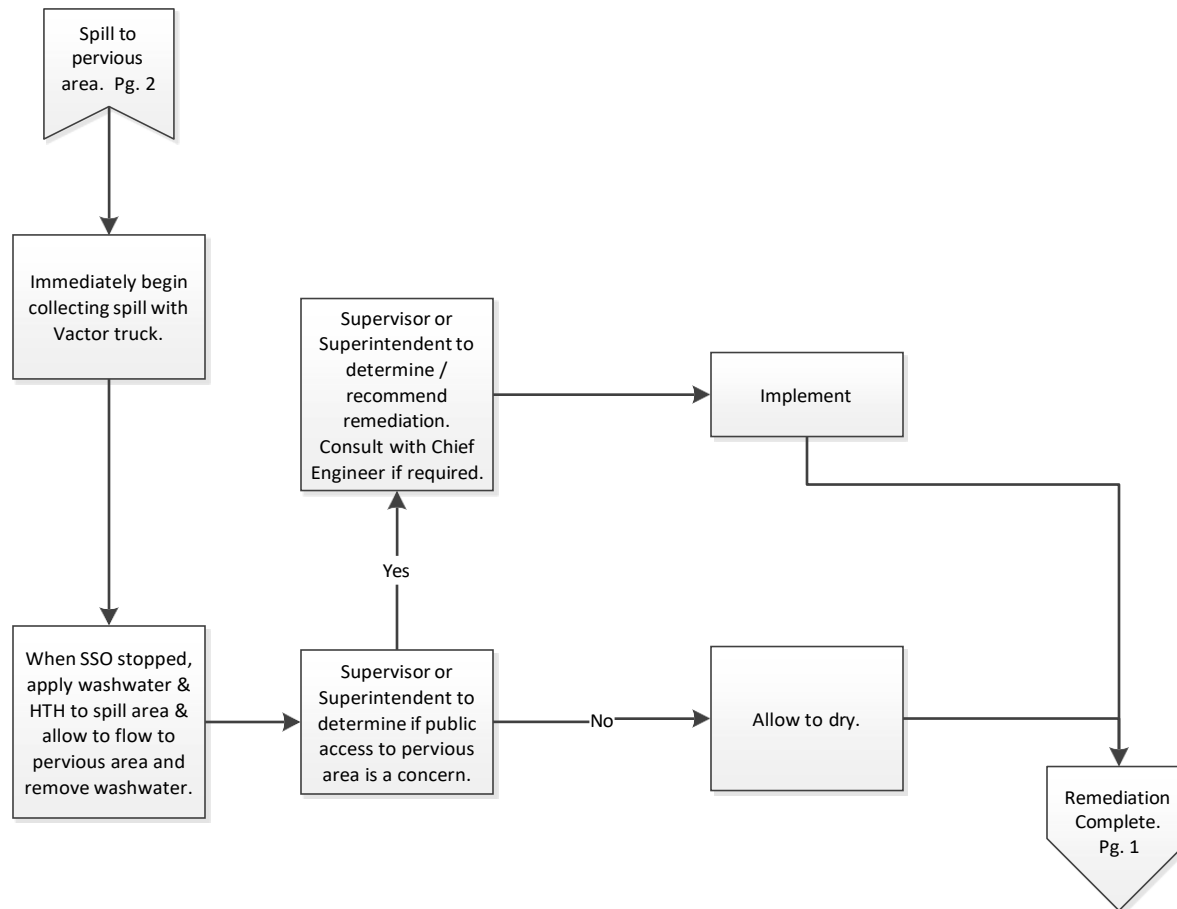
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

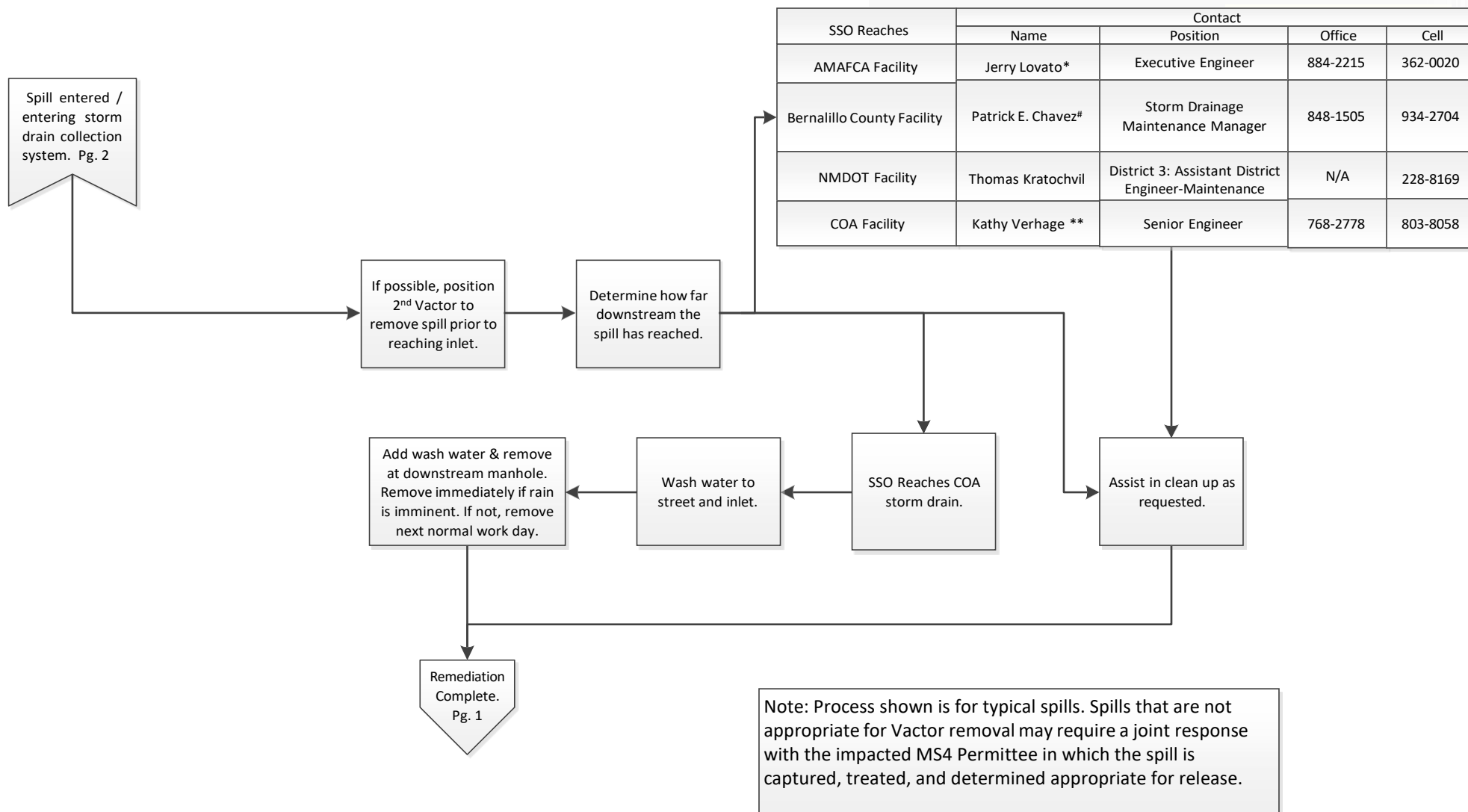
12-1-2019



Overflow Emergency Response Plan

12-1-2019

Albuquerque Bernalillo County Water Utility Authority



*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

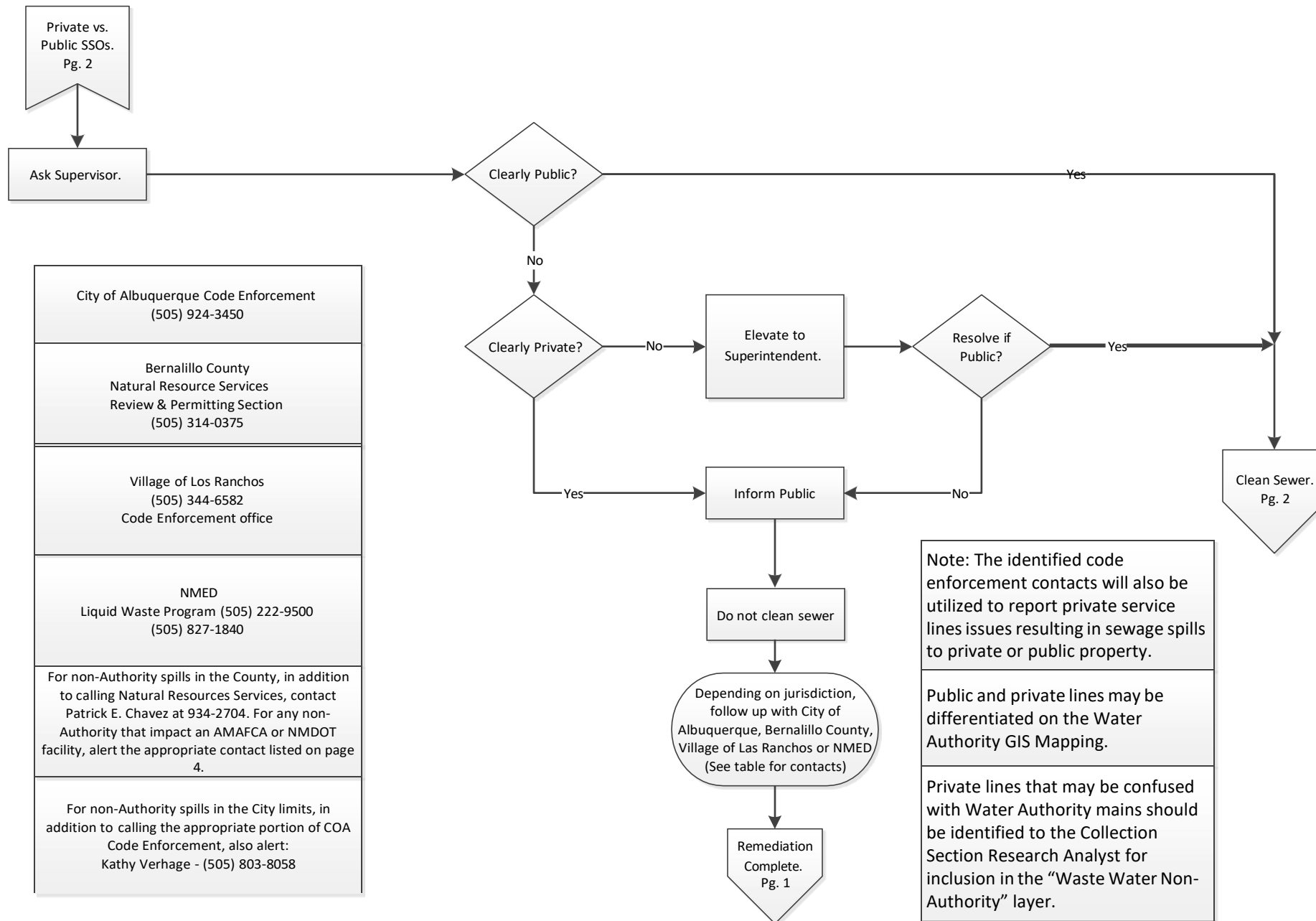
#If Patrick E. Chavez is not immediately available, call:

Kali Bronson: Stormwater Program Compliance Manager (505) 401-1779

Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

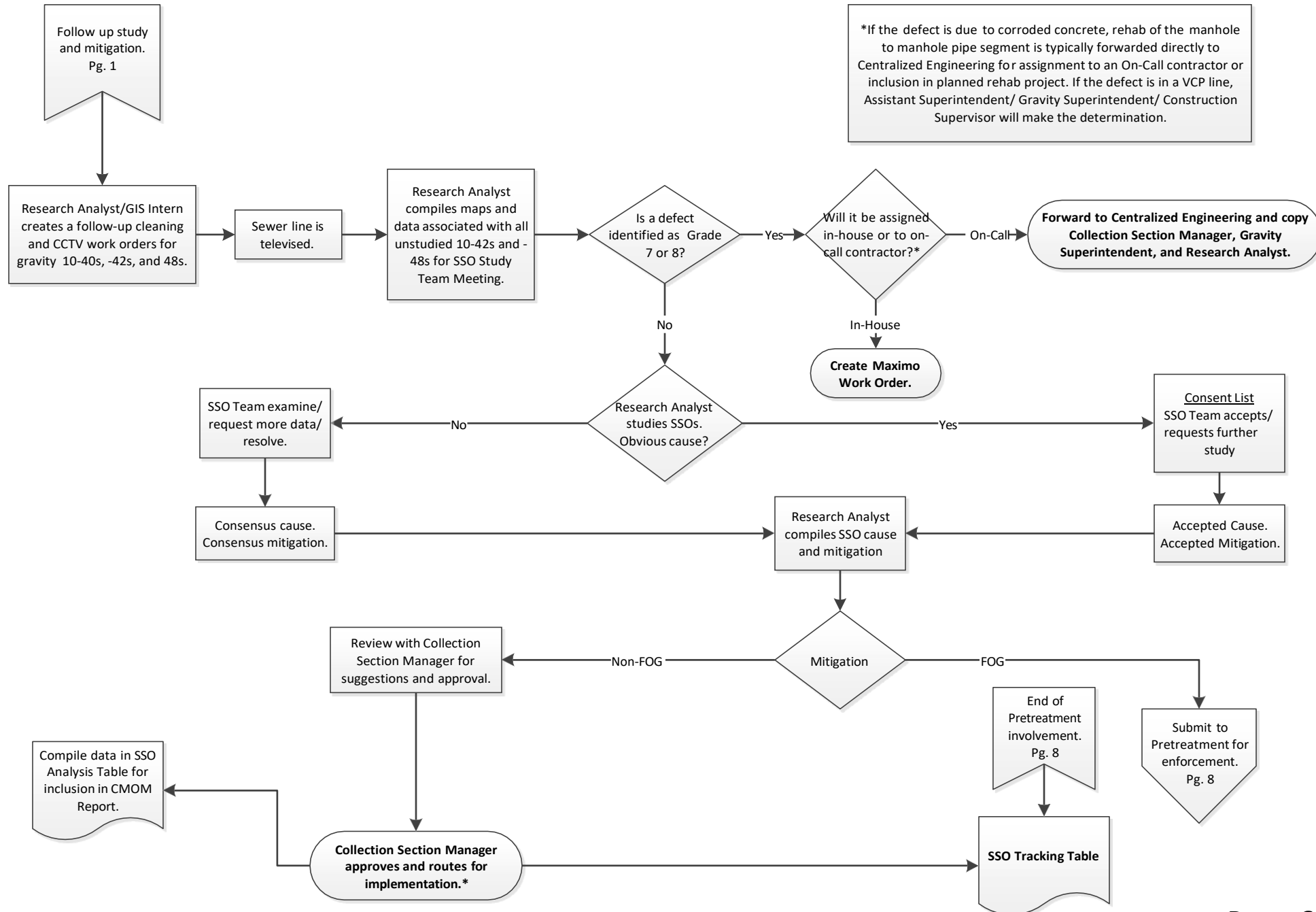
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

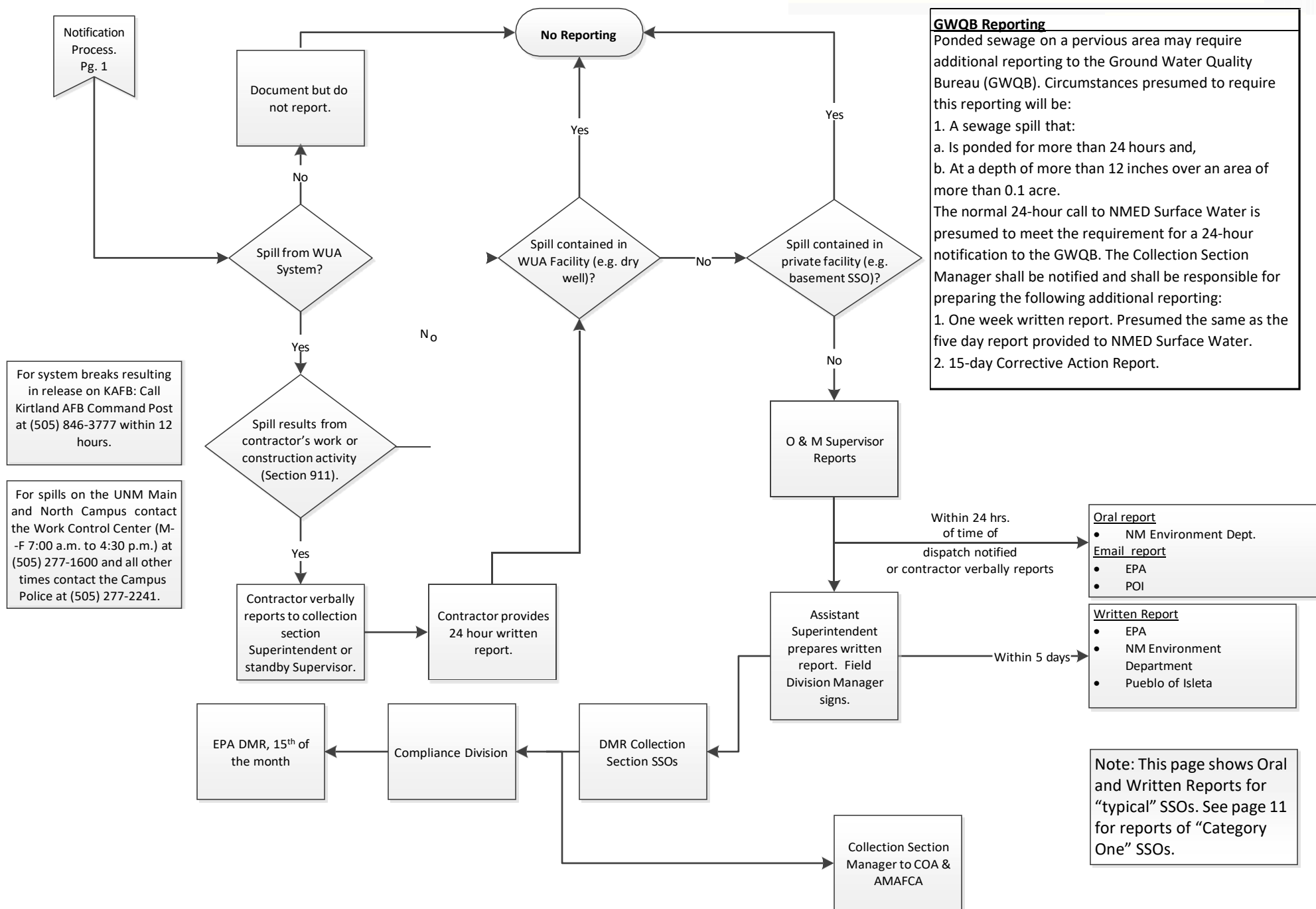
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

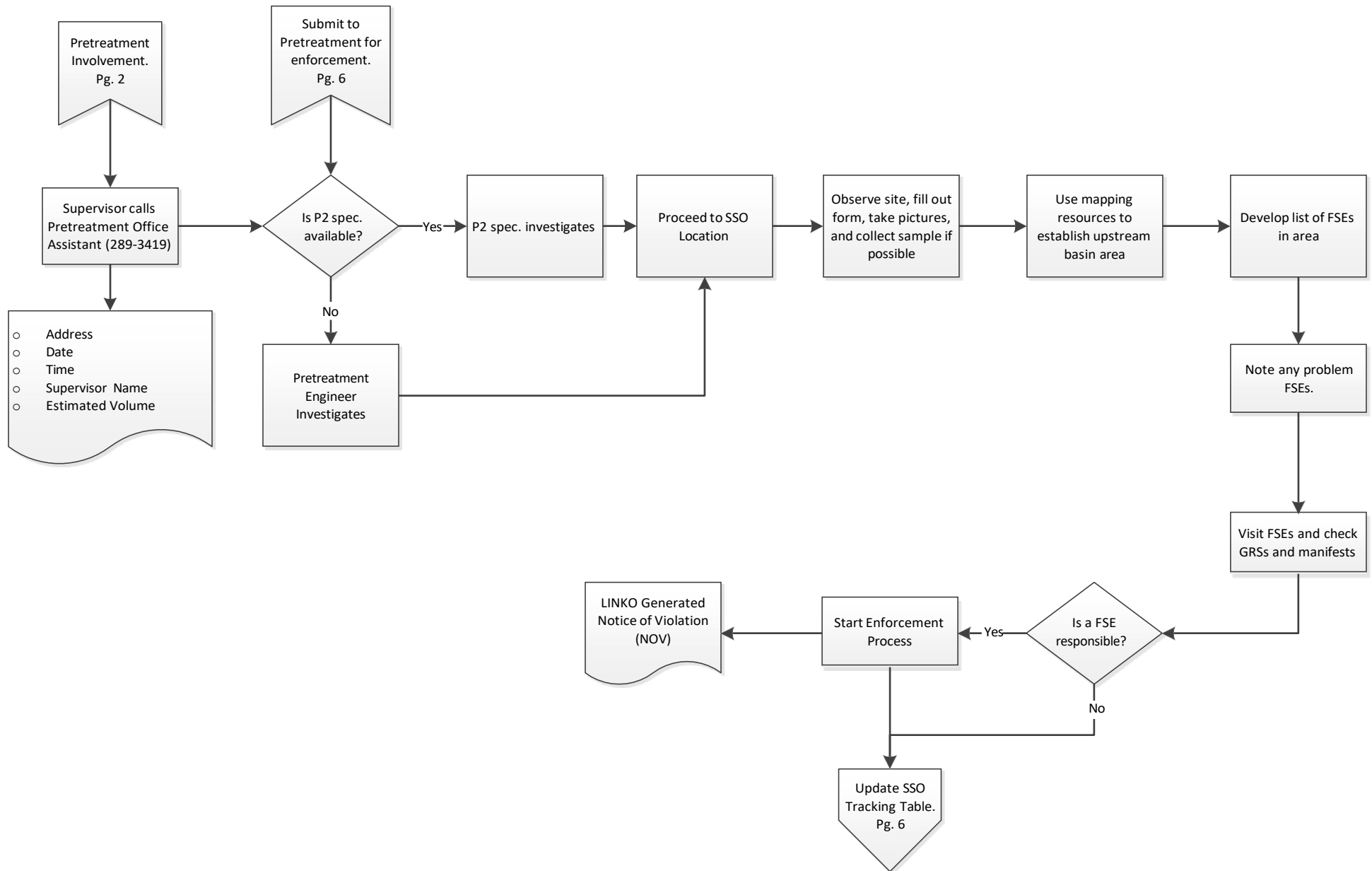
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

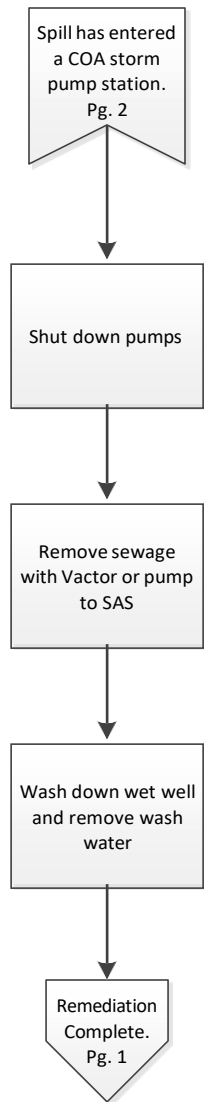
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

12-1-2019

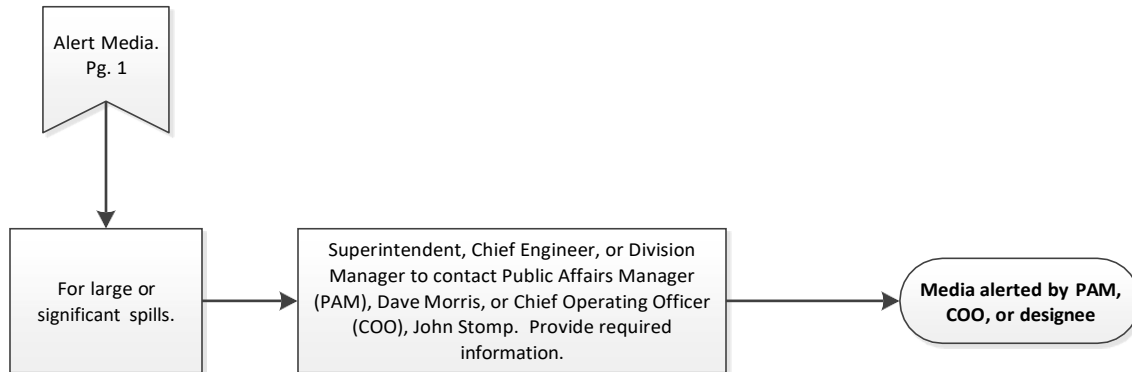


Note: Process shown is for typical spills. Some spills may require a joint response with the City of Albuquerque in which the spill is captured, treated, and determined appropriate for release.

Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

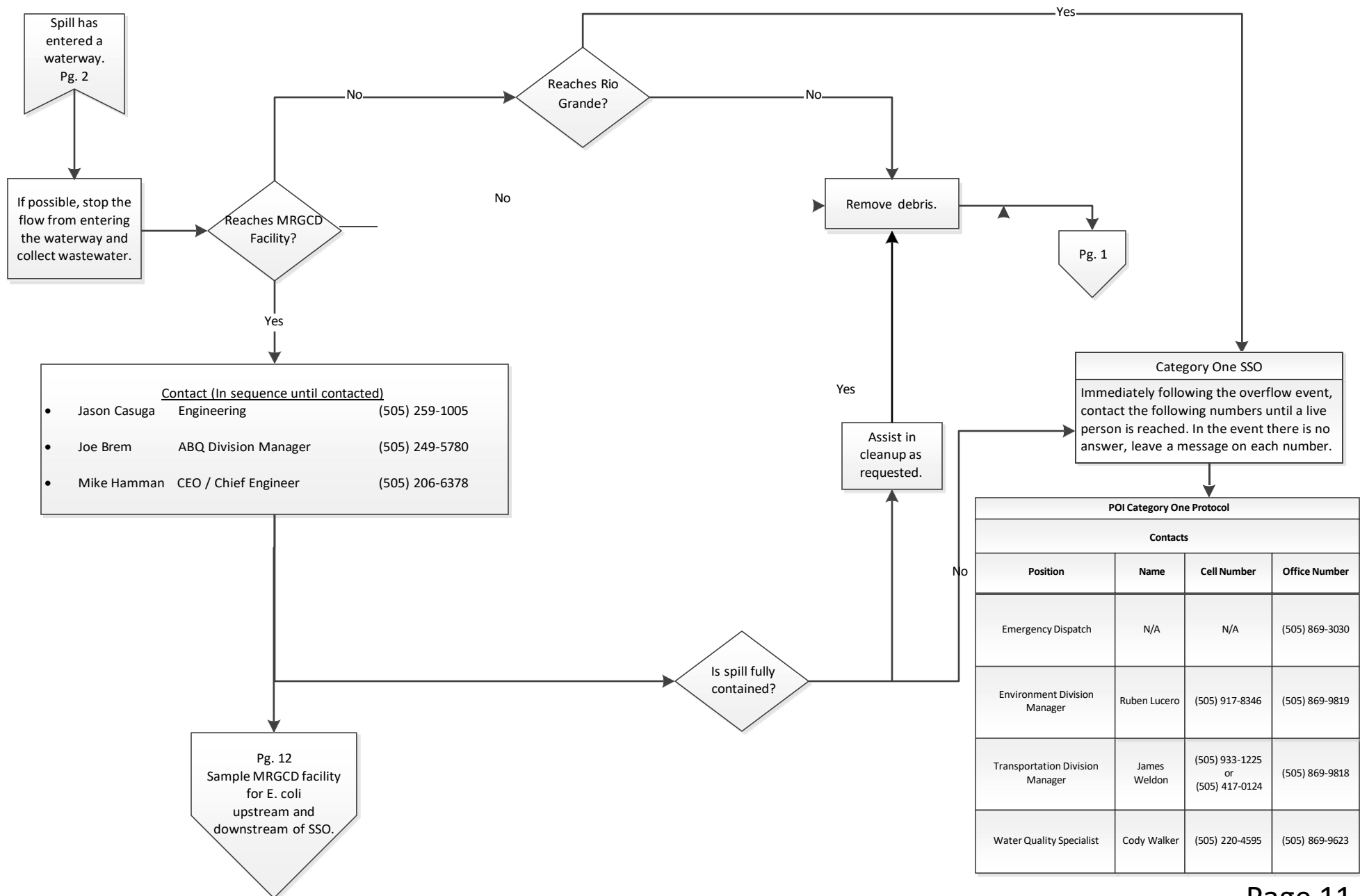
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

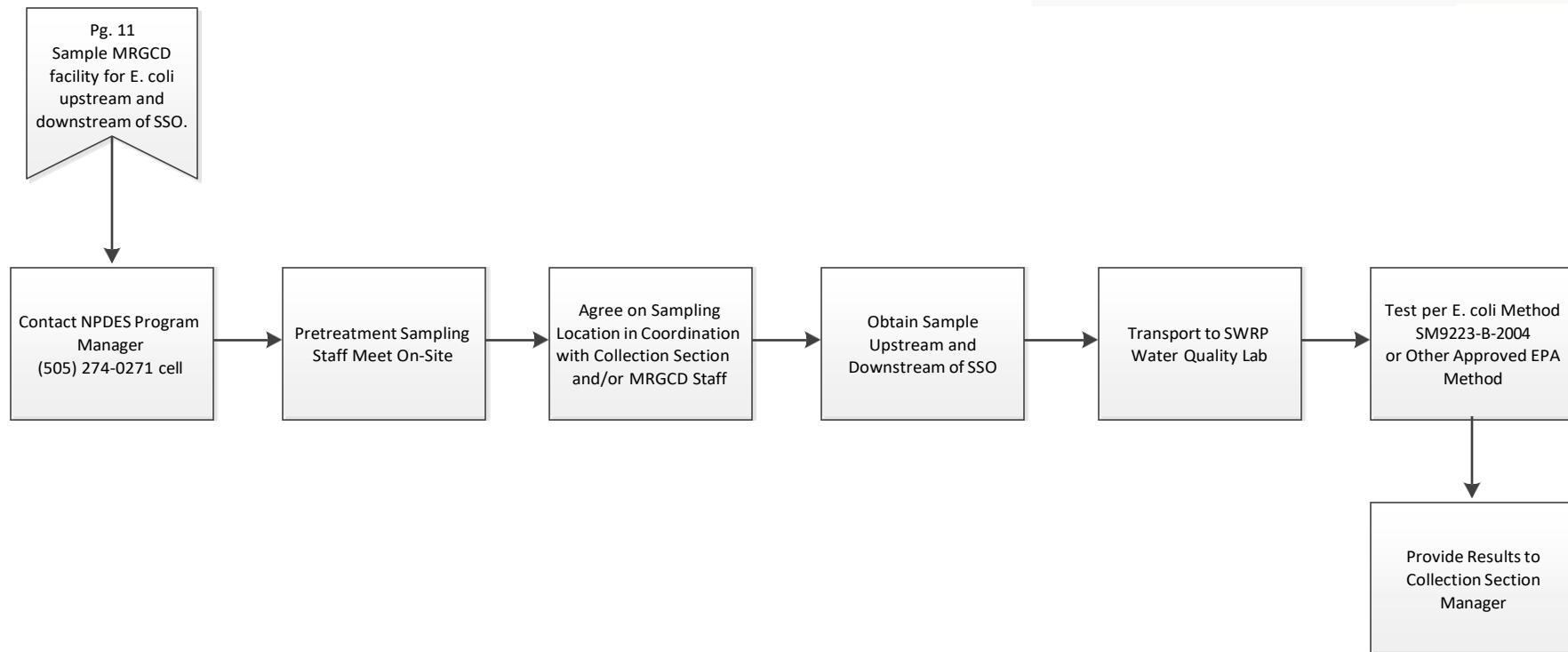
12-1-2019



Overflow Emergency Response Plan

Albuquerque Bernalillo County Water Utility Authority

12-1-2019



Goal Summary - CY2021 CMOM Report		
Goal	Timing	Page # for Discussion
Submit FOGS and Enforcement Policies to EPA for approval once the legal review is complete	TBD	4
CCTV all gravity pipes suffering a blockage. For all SSOs, determine a cause and mitigation and report in the next CMOM report	Annually	6
Public advertising	On-Going	12
Distribute FSE fliers in English, Vietnamese and Spanish, and improve FOG inspections by using advance inspection tools	CY2023	12
Update OERP	As required	13
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 3

Review of the
Integrated Compliance Information System (ICIS)
Database
For
the period
from
January 1, 2020, to September 20, 2022

FE&C

NPDES

AIR

Admin

Reports

Help

DESPARZA

Logout



Search Permits

Related NPDES Violations

ADD SINGLE EVENT VIOLATION

List of Violations Related to the Permit

Record Numbers 1 to 79

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	01/12/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	01/17/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	02/12/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	02/18/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/18/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/27/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/29/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	03/12/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	03/24/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/01/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/18/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/30/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	05/01/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	06/16/2020			Delete

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	06/27/2020			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	07/24/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	10/06/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	10/12/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	11/26/2020			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	12/15/2020			Delete
Single Event Violation	A0012 Effluent Violations - Numeric effluent violation	A0012	02/13/2021			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	03/05/2021			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	03/07/2021			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	03/17/2021			Delete
Single Event Violation	A0012 Effluent Violations - Numeric effluent violation	A0012	03/24/2021			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	04/03/2021			Delete
Single Event Violation	D0017 Permit Violations - Violation Specified in Comment	D0017	04/10/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	07/30/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	07/31/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	11/18/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	12/18/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	12/29/2021			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	01/13/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	01/17/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	01/18/2022			Delete

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	01/22/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	01/23/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/05/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/14/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/20/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	02/21/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	03/31/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/13/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/14/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/20/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/24/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	04/26/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	05/01/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	05/10/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	05/23/2022			Delete
Single Event Violation	R013S Dry-weather SSO, no discharge to waters of the U.S., that may endanger health or the environment	R013S	05/24/2022			Delete
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	03/31/2020			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	04/30/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 Q2	E90	04/30/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C2	E90	04/30/2020	T-05/31/2020	2-08/31/2020	
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	04/30/2020			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 Q1	E90	05/31/2020	V-05/31/2020	2-08/31/2020	
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 Q2	E90	05/31/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C2	E90	05/31/2020	T-05/31/2020	2-08/31/2020	
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	05/31/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	06/30/2020			
Effluent Violation	001 A 50060 Chlorine, total residual Disinfection, Process Complete Season ID:0 C3	E90	08/31/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	08/31/2020			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	09/30/2020			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	10/31/2020			
DMR Non-Receipt Violation	001 Y 39516 Polychlorinated biphenyls [PCBs] Effluent Gross Season ID:0 C3	D80	11/30/2020	K-01/15/2021	2-06/15/2021	
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	01/31/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	02/28/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	06/30/2021			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	09/30/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	10/31/2021			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C2	E90	10/31/2021			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	10/31/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	12/31/2021			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	01/31/2022			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	04/30/2022			

Violation Type	Violation Information	Violation Code	Violation Date	RNC Detection Code-Date	RNC Resolution Code-Date	Action
Effluent Violation	001 A 00400 pH Effluent Gross Season ID:0 C1	E90	05/31/2022			
Effluent Violation	001 A 51040 E. coli Effluent Gross Season ID:0 C3	E90	06/30/2022			
Effluent Violation	001 A 71900 Mercury, total [as Hg] Effluent Gross Season ID:0 C3	E90	07/31/2022			

Record Numbers 1 to 79

[ICIS Home](#) [Reports](#) [Help](#) [Logout](#) [Back to Top](#)

Technical issues? Contact user support Help Desk at (202) 564-7756 or via email at ICIS@epa.gov

U.S. Environmental Protection Agency 

ABCWUA/Southside Water Reclamation Plant (SWRP)

NPDES Permit No. NM0022250

Albuquerque, New Mexico

Inspection Date 09/21/2022

Appendix 4

Opening and Closing Conference Sign-in Sheets



United States Environmental Protection Agency
Region 6 – Water Enforcement Branch
1201 Elm Street, Suite 500
Dallas, Texas 75270

DATE:

9/21/2022

TIME:

SUBJECT: ABCWUA WWTP

NPDES Permit No: NM0022250

MEETING ATTENDEES-
OPENING CONFERENCE

NAME	COMPANY	PHONE NO.	EMAIL
Steve Lujan	ABCWUA	505 967 0311	slujan@abcwua.org
Mark Holstad	ABCWUA	505-289-3450	mholstad@abcwua.org
Merat Zarreii	ABCWUA	(505) 274-0271	mzarreii@abcwua.org
STAN ALLEN	ABCWUA	505-238-9940	sallan@abcwua.org
H Warren	ABCWUA	505-975-6328	hwarren@abcwua.org
Danielle Shorlyn	ABCWUA	505-803-1970	dshorlyn@abcwua.org



United States Environmental Protection Agency
Region 6 – Water Enforcement Branch
1201 Elm Street, Suite 500
Dallas, Texas 75270

DATE:

9/21/22

TIME:

1:50

SUBJECT: ABCWUA WWTP

NPDES Permit No: NM0022250

MEETING ATTENDEES-
CLOSING CONFERENCE

NAME	COMPANY	PHONE NO.	EMAIL
Danielle Shoryn	ABCWUA	505-803-1970	dshoryn@abcwua.org
Mark Zarreii	ABCWUA	(505) 274-0271	mzarreii@abcwua.org
STARR BLAND	ABCWUA	505-238-9940	sblair@abcwua.org
Mark Holstad	ABCWUA	505-289-3450	mholstad@abcwua.org
JARED RAY	ABCWUA	505-289-3449	jray@ABCWUA.ORG
Steve Lujan	ABCWUA		slujan@ABCWUA.org
Johanna Malouff	ABCWUA	505 289-3407	jmalouff@abcwua.org
H. Warren	ABCWUA	505-975-6328	hwarren@abcwua.org
Shawn Hardeman	ABCWUA	505-289-3481	shardeman@abcwua.org