



NEW MEXICO  
ENVIRONMENT DEPARTMENT



*Surface Water Quality Bureau*

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RON CURRY  
Secretary  
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Deputy Secretary

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**Certified Mail: Return Receipt Requested**

August 27, 2010

Mr. Larry Webb  
Utilities Division Director  
P.O. Box 15550  
Rio Rancho, NM 87174-5550

**Re: Major-Municipal, SIC 4952, NPDES Compliance Evaluation SSO Inspection, Rio Rancho WWTP #2, NM0027987, August 24 & 25, 2010**

Dear Mr. Webb,

Enclosed please find a copy of the report for the referenced inspection of the sewer line spill that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the Federal Clean Water Act.

You are encouraged to review the inspection report, correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications.

I wish to thank you for the cooperation extended to NMED personnel while at the spill site. If you have any questions about this inspection report, please feel free to give me a call at (505) 222-9587.

Sincerely,

/s/

Sarah Holcomb  
Environmental Scientist/Specialist  
Surface Water Quality Bureau

Cc: Marcia Gail Bohling, USEPA (6EN-AS) via email  
Samuel Tate, USEPA (6EN-AS) via email  
Carol Peters-Wagon, USEPA (6EN-WM) via email  
Larry Giglio, USEPA (6WQ-P) via email  
Diana McDonald, USEPA (6EN-WM) via email  
NMED District 1 via email  
Cliff Leeper, Project Manager via email



### NPDES Compliance Inspection Report

#### Section A: National Data System Coding

Transaction Code	NPDES										yr/mo/day					Inspec. Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 2 7 9 8 7 11 12 1 0 0 8 2 5 17 18 & 19 S 20 1																		
Remarks																		
R I O R A N C H O # 2 W W T P																		
Inspection Work Days			Facility Evaluation Rating				BI	QA	Reserved									
67 1 69			70 1				71 N	72 N	73 74 75 M A J O R 80									

#### Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) RIO RANCHO SSO; RIO RANCHO, NM NEAR THE INTERSECTION OF BROADMOOR AND HIGH RESORT BLVD. FROM HWY 528, TURN WEST ON HIGH RESORT AND FOLLOW TO LOMA VISTA. TWO SPILL SITES ARE LOCATED IN THE AREA.	Entry Time /Date <b>0920 hours / 8-25-2010</b>	Permit Effective Date 2-1-2004
	Exit Time/Date <b>1200 hours / 8-25-2010</b>	Permit Expiration Date 1-31-2009
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) MR. LARRY WEBB, UTILITIES DIVISION MANAGER (505) 896-8715 MR. CLIFF LEEPER, PROJECT MANAGER CH2M HILL (505) 896-8810	Other Facility Data SIC: 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number MR. LARRY WEBB, UTILITIES DIVISION DIRECTOR (505) 896-8715 P.O. BOX 15550, RIO RANCHO, NM 87174-5550	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

#### Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

N	Permit	N	Flow Measurement	N	Operations & Maintenance	U	CSO/SSO
S	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

#### Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

PLEASE SEE THE ATTACHED DOCUMENT: "MONTOYAS ARROYO SANITARY SEWER OVERFLOW" FOR FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) SARAH HOLCOMB /s/ Sarah Holcomb	Agency/Office/Telephone/Fax NMED/SWQB 505-222-9587	Date 8-27-2010
Signature of Management QA Reviewer RICHARD POWELL /s/ Richard Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-2798	Date 8-27-2010

**Rio Rancho #2 WWTP NPDES Permit No. NM0027987**  
**Montoyas Arroyo Sanitary Sewer Overflow**  
**Spill dates: August 24-25, 2010**  
**NMED Site Inspection: August 25 & 26, 2010**  
**NMED-SWQB Inspector: Sarah Holcomb**

The NPDES permit requires (in Part I.D):

*Overflow reporting:*

*The permittee shall report all overflows with the Discharge Monitoring Report submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: the date, time duration, location, estimated volume, and cause of the overflow; observed environmental impacts from the overflow; actions taken to address the overflow; and ultimate discharge location if not contained (e.g. storm sewer system, ditch tributary).*

*Overflows that endanger human health or the environment shall be orally reported to EPA at (214) 665-6595, and NMED Surface Water Quality Bureau at (505) 827-0187, within 24 hours from the time permittee becomes aware of the circumstance. A written report of the overflows that endanger health or the environment shall be provided to EPA and the NMED Surface Water Quality Bureau within 5 days of the time the permittee becomes aware of the circumstance.*

First Notification to NMED:

On Tuesday, August 24, 2010, Sandra Gabaldon of NMED SWQB received a message from Mr. Kevin Marback, Lead Operator OMI/Rio Rancho which was left at 9:00am. Mr. Marback reported the sewer line break that had occurred earlier that morning. Mr. Marback also called other environmental agencies including EPA, Sandia Pueblo, and Robert George of NMED GWQB at about the same time that he called Ms. Gabaldon.

Spill Content: Untreated domestic sewage from the city of Rio Rancho, NM.

Spill Volume: Mr. Cliff Leeper estimated that approximately 684,000 gallons of raw wastewater was discharged into the Montoyas Arroyo, which most likely did make it to the Rio Grande, 5.5 miles away.

Duration: The first break was discovered around 9:00am Tuesday morning. This line was plugged and the raw wastewater diverted into an adjacent line. The second break was discovered late Tuesday and was still flowing at the time of the inspection. According to Mr. Leeper, the fixes in both break areas were implemented by 9:45pm Wednesday night.

Location: Montoyas Arroyo. The first line break occurred near the intersection of High Resort and Broadmoor. The second line break occurred near the intersection of High Resort and Loma Vista.

Site Description: The city of Rio Rancho historically installed sewer lines near arroyos running through the city, and over time, erosion has exposed those pipelines, leading to issues such as this.

This sewer line is slated for replacement in the near future (the project design is currently out to bid) and the main trunk line will be replaced with a new 24" line. The Montoyas Arroyo runs through Rio Rancho along High Resort Blvd. and borders residential communities and public recreation areas, as well as crosses a state highway (Hwy 528). The line breaks occurred adjacent to private residences, a sports complex, and a local high school.

Cause of the Overflow: Rio Rancho experienced a large rain event (>2 inches) Monday evening. The resulting water flow through the Montoyas Arroyo (estimated at about 3000 cfs) created severe erosion problems – Please see Picture #1. The erosion created a large swale on the west side of the arroyo, where the sewer line was located, and the force of the water washed away the manhole located there. The force of the water also broke the line further down the arroyo, just above the sports complex on High Resort Blvd.

Current Condition:

Ms. Sarah Holcomb (NMED SWQB) arrived onsite at 0920 hours on Wednesday August 25, 2010 (along with Mr. Robert George and Mr. Russell Isaac of the NMED/GWQB) and met with Mr. Larry Webb (Utilities Division Manager, City of Rio Rancho) and Mr. Cliff Leeper (Project Manager, CH2M Hill/OMI). Mr. Webb and Mr. Leeper escorted the inspectors on a tour of the line breaks and the repairs currently underway. The area of the first line break had been mitigated by plugging the original 15” line and pumping the raw wastewater into an 8” line in an adjacent street (Chessman Rd.). [Please see Photo #2.] Some HTH had been applied for disinfection. Mr. Leeper indicated that the flood waters had eroded about 75 cubic yards of sand from the banks of the arroyo in that area. Crews were currently working to dig another trench to reinstall a new 15” line. [Please see Photo #3.]

When inspectors questioned what the city was doing to ensure that the 8” line would handle peak flows, Mr. Webb and Mr. Leeper indicated that if the 8” line could not handle the peak flows, then the extra flow would travel into the Montoyas, which was why the crews had installed berms in order to contain the extra flow in the area of the break. The inspector suggested utilizing local media sources to suggest that residents conserve water during the time needed to fix the line. Mr. Webb indicated that this was not an option that the city would like to pursue.

The line downstream of the first line break was completely plugged with sediment and gravel. The inspectors estimated that approximately 3000’ of line would need to be cleared. The city had been searching for vacor trucks to assist in jetting the line. Raw wastewater above the sediment plug was being directed through 1500’ of hose into a manhole downstream of the second line break.

The second line break occurred above the city’s sports complex area. The trunk line was located in the bottom of the arroyo, and a feeder line was located in the bank of the arroyo. The erosion that occurred here tore the feeder line away from the trunk line. The feeder line was still flowing (just a trickle) but the trunk line was leaking substantially. [Please see Photo #4.] The raw wastewater was flowing up from beneath the floor of the arroyo and flowing downstream. City utility staff was spreading HTH along the floor of the arroyo to disinfect the wastewater. [Please see Photo #5.] The city staff were also trying to assess where the nearest upstream manhole was, but it appeared that it had been covered up with construction debris. The city staff had constructed a berm just east of the sports complex area in order to contain any of the flows from the second break. [Please see Photo #6.] The inspector indicated that the city should keep track of how much HTH was being applied and should also take chlorine residuals at the berm located downstream.

Ms. Holcomb visited the site with Mr. Cliff Leeper and Mr. David Sohns on August 26, 2010 to confirm the fixes. At break site #1, crews had reinstalled 15” line and a new manhole, and were in the process of backfilling the bank of the arroyo. At break site #2, a pipeline fix was underway and crews were integrating the applied HTH into the soil of the arroyo to avoid the next storm flows carrying the chlorine down to the Rio Grande.

The city’s written incident report is due to EPA and the NMED SWQB 5 days from the time the city was aware of the spill (August 29<sup>th</sup>, 2010). A future corrective actions report will detail the city’s approach to dealing with SSO issues in the long term.

NMED/SWQB

Official Photograph Log

Photo # 1

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 1011 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: The area to the top left of the arroyo had been eroded by the flood waters. The same flood waters created another swale to the bottom right (outside the frame of the picture) where the manhole was washed out.		



NMED/SWQB

Official Photograph Log

Photo # 2

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 0943 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: Raw wastewater pump at broken 15" line.		



NMED/SWQB

Official Photograph Log

Photo # 3

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 0955 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: Work underway to construct replacement 15" line on east side of Montoyas.		



NMED/SWQB

Official Photograph Log

Photo # 4

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 1026 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: Second line break above city sports complex.		



NMED/SWQB

Official Photograph Log

Photo # 5

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 1032 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: Section of 1500' length of hose diverting flow from above sediment plug to manhole below. City staff are also pictured applying HTH to arroyo.		



NMED/SWQB

Official Photograph Log

Photo # 6

Photographer: Sarah Holcomb	Date: 8-25-2010	Time: 1125 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: Berm constructed downstream of city sports complex to contain wastewater from second break.		



NMED/SWQB

Official Photograph Log

Photo # 7

Photographer: Sarah Holcomb	Date: 8-26-2010	Time: 1337 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Broadmoor)		
Subject: New manhole installed at break site #1. Crews were backfilling the dirt into the trench and building up the side of the arroyo.		



NMED/SWQB

Official Photograph Log

Photo # 8

Photographer: Sarah Holcomb	Date: 8-26-2010	Time: 1352 hours
City/County: Rio Rancho/Sandoval		
Location: Montoyas Arroyo (near the intersection of High Resort and Loma Vista)		
Subject: Pipe repair and new raised manhole underway at break site #2.		





Sewer Break #1



Sewer Break #2



Berm to contain break #2

528

Google

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Imagery Date: Nov 24, 2009

35°15'34.52" N 106°39'46.48" W elev 1612 m

Eye alt 4.93 km