SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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DAVE MARTIN
Secretary

BUTCH TONGATE
Acting Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 6, 2011

Mr. Joe Chwirka, Manager
Albuquerque Bernalillo County Water Utility Authority
PO Box 1293
Albuquerque, NM 87103-1293

Re: Major Municipal, SIC 4952, NPDES Pretreatment Compliance Inspection, Southside Water Reclamation Facility, NM0022250, October 3, 2011

Dear Mr. Chwirka,

Enclosed please find a copy of the report and check list for the referenced inspection 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.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate.

I wish to thank you for the cooperation extended to NMED personnel by yourself, Barbara Gastian, Jeff Romanowski, Mark Kelly, and Ronny Lucero while at the ABCWUA Southside Water Reclamation Facility. If you have any questions about this inspection report, please contact me at (505) 222-9587 or sarah.holcomb@state.nm.us.

Sincerely,
/s/ Sarah Holcomb
Sarah Holcomb
Environmental Scientist/Specialist
NMED Surface Water Quality Bureau

Cc: Marcia Adams, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Samuel Tates, USEPA (6EN-AS) by e-mail
Larry Giglio, USEPA (6EN-P) by e-mail
Sonia Hall, USEPA (6EN-AS) by e-mail
Hannah Branning, USEPA (6EN-AS) by e-mail
Rudy Molina, USEPA (6EN-P) by e-mail
Tony Loston, USEPA (6EN-WM) by e-mail
William Chavez, NMED Acting District 1 Manager (by e-mail)
Sandra Martin, NMED Hazardous Waste Bureau (by e-mail)

Mike Coffman, NMED Operator Certification Program (by e-mail)

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	2	NPDES	11	yr/mo/day	17	Inspec. Type	18	Inspector	19	Fac Type	20
	N	5	NM0002225	12	111003		P		S		2	

Remarks: MAJOR MUNICIPAL

67	Inspection Work Days	69	70	Facility Evaluation Rating	71	BI	72	QA	73	74	75	Reserved	80
			3			N		N					

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*
ABCWUA SOUTHSIDE WATER RECLAMATION FACILITY, BERNALILLO COUNTY: FROM I-25, TAKE THE RIO BRAVO EXIT AND HEAD WEST. TURN LEFT ON 4TH STREET AND THE FACILITY WILL BE ON THE RIGHT. ENTER AT GUARD SHACK.

Entry Time /Date: **0815 hours / 10-3-2011**

Permit Effective Date: **5-1-2005**

Exit Time/Date: **1245 hours / 10-3-2011**

Permit Expiration Date: **4-30-2010**

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
MR. JOE CHWIRKA, PLANT OPERATIONS MANAGER (505) 873-7041 JCHWIRKA@ABCWUA.ORG
MS. BARBARA GASTIAN, COMPLIANCE MANAGER (505) 857-8278 BGASTIAN@ABCWUA.ORG

Other Facility Data

GPS:
N. 35° 01' 11.55"
W. -106° 39' 40.36'

SIC: 4952

Name, Address of Responsible Official/Title/Phone and Fax Number
MR. JOE CHWIRKA, PLANT OPERATIONS MANAGER (505) 873-7041
PO BOX 1293, ALBUQUERQUE, NM 87103-1293

Contacted: Yes * No

Section C: Areas Evaluated During Inspection

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

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

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

1. **INSPECTORS ARRIVED AT THE FACILITY AT 0815 HOURS ON OCTOBER 3, 2011. THE INSPECTOR CONDUCTED AN ENTRANCE INTERVIEW WITH MR. JEFF ROMANOWSKI, PLANT SUPERINTENDENT, MR. MARK KELLY, INDUSTRIAL WASTE ENGINEER, AND MR. RONNY LOVATO, PRETREATMENT ENFORCEMENT COORDINATOR, WHERE SHE MADE INTRODUCTIONS, PRESENTED CREDENTIALS AND DISCUSSED THE PURPOSE OF THE INSPECTION.**
2. **PLEASE SEE REPORT FOR FURTHER EXPLANATIONS.**
3. **AN EXIT INTERVIEW TO DISCUSS THE PRELIMINARY FINDINGS OF THE INSPECTION WAS CONDUCTED WITH MR. JOE CHWIRKA, PLANT OPERATIONS MANAGER, MS. BARBARA GASTIAN, COMPLIANCE MANAGER, AND THE AFOREMENTIONED PARTIES AT THE FACILITY ON OCTOBER 3, 2011. A VISIT WAS MADE TO THE ABCWUA FERRIC CHLORIDE STORAGE FACILITY, THEN A FOLLOW UP CALL WAS MADE TO MR. CHWIRKA AND MS. GASTIAN ON OCTOBER 4, 2011.**

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Sarah Holcomb */s/ Sarah Holcomb*	NMED/SWQB 505-222-9587	10-6-2011
Signature of Management QA Reviewer		

Richard Powell ***/s/ Richard Powell***	**Agency/Office/Phone and Fax Numbers** **NMED/SWQB 505-827-2798**	**Date** **10-6-2011**

EPA Form 3560-3 (Rev. 9-94) Previous editions are obsolete.

Pretreatment Compliance Inspection (PCI) Report

Name of the Municipality: Albuquerque Bernalillo County Water Utility Authority (ABCWUA) Southside Water Reclamation Facility

NPDES Permit No.(s): NM0022250

Name of Inspector: Sarah Holcomb (NMED SWQB), Sandra Gabaldon (NMED SWQB) and Mike Coffman, (NMED Operator Certification Program)

Date PCI Performed: October 3, 2011

Name and Title of Facility Representative:
Mr. Joe Chwirka, Plant Operations Manager

Telephone: (505) 873-7041

Name and Title of Other Participants:

Ms. Barbara Gastian, Compliance Manager, Mr. Jeff Romanowski, Plant Superintendent, Mr. Mark Kelly, Industrial Waste Engineer, Mr. Ronny Lovato, Pretreatment Enforcement Coordinator

Pretreatment Program Approval Date:
September 21, 1985

Date of Last PCI/Audit: August 24-28, 2009

Date of Last Annual Report Submitted: September 30, 2010

Number of Industrial Users (IUs) Visited: 1

Name of IUs Visited: ABCWUA Ferric/Ferrous Chloride Storage Facility near Paseo del Norte and Edith Blvd.

NOTE: Any "no" answer must be explained in the space provided or on a separate sheet of paper.

A. Industrial User Survey

1. Have any new major IUs been added to the sewer system (or deleted from the system) since the last inspection? Yes X No

2. Has the EPA been notified of any changes? Yes X No

3. If EPA has not been notified, list any additions or deletions:

Additions	Deletions

4. Has the industrial survey been kept updated? Yes X No _____

5. What procedure is being used to update the industrial user survey?
Industry consultants proactively call the pretreatment program. Mr. Pat Akin (Pretreatment Program Manager, absent on the day of this inspection) has been reviewing a list of SIC codes to determine facilities to review. Pollution Prevention Specialist (Ben Zimmerman) has been doing P2 inspections at various facilities (11 in September).

6. Have all industrial users been properly categorized? Yes X No _____

7. Number of major industrial users 67

8. Number of categorical industrial users 36

B. Local Limits

1. Are the current local limits the same as those included in the approved pretreatment program Yes X No _____

2. Has EPA been notified of any changes? Yes _____ No N/A

3. If there are any apparent problems with the local limits, explain:

4. Have pollutant scans of POTW influent, effluent and sludge been conducted at the frequency required by the NPDES permit? Yes X No _____

5. Have there been any inhibitions/upsets at the POTW, since the last PCI/Audit, known (or suspected) to be caused by one or more industrial users? Yes X No _____

If yes, explain (include any action taken by the municipality to ensure there will be no recurrence of such incidents) The municipality was affected by a discharge of 44,000 gallons of ferric chloride to the sewer system from a storage facility. The WRF management is currently discussing what measures will be taken in the future to prevent this from occurring again. Please see Attachment A for further details.

C. Industrial User Control Mechanism

1. Is the IU control mechanism (permit, contract etc.) the same as that required by the approved pretreatment program? Yes _____ No _____

If no, explain

2. Have all control mechanisms been issued? Yes _____ No X

If no, how many have been issued?

How many are left to be issued? One – Waldeck Jewelry (zero discharge). 433/464.

When will all be issued? Should be issued in about a month and a half.

3. Are all control mechanisms in effect? Yes X No ____

4. Does the control mechanism issued to each IU contain:

- an expiration date Yes X No ____
- applicable discharge limits Yes X No ____
- IU self-monitoring requirements Yes X No ____
- IU reporting requirements Yes X No ____

Standard Conditions:

- non transferability Yes X No ____
- revocation clause Yes X No ____
- prohibition of bypass Yes X No ____
- slug load notification requirement Yes X No ____
- change in process notification Yes X No ____
- POTW right of entry Yes X No ____

If no, are these covered by another type of legal requirement? Yes ____ No N/A

A "no" response does not necessarily constitute a violation.

D. <u>Compliance Monitoring</u>

1. Has each industrial user been inspected and sampled at the frequency required by the approved pretreatment program?

- Sampled Yes X No ____
- Inspected Yes X No ____

If no, explain: ____

2. Does the IU inspection consist of:

- Inspection of the manufacturing facilities? Yes X No ____
- Inspection of pretreatment facilities? Yes X No ____
- Inspection of the sampling procedures? Yes X No ____
- Inspection of the monitoring records? Yes X No ____

3. Are the inspections sufficiently detailed to identify processes and their associated discharges that are regulated by Federal Categorical Standards? Yes X No ____

4. Does the POTW verify the source and discharge location of all categorical wastewater streams? Yes X No ____

5. Does the POTW verify the approved analytical techniques are being used by the IUs to generate their self-reporting data? Yes X No ____

6.	Where the IU is required to monitor and report flow, does the POTW verify the accuracy of the IUs flow measurement at least annually?	Yes X	No
7.	Are records kept of each inspection made?	Yes X	No
8.	Are the inspection reports adequate?	Yes X	No
9.	Are the inspections announced or unannounced?	Yes BOTH	No
10.	Does the POTW sampling of the IU include analysis for all regulated pollutants?	Yes X	No
11.	Do all analyses conform to EPA methodologies?	Yes X	No
12.	Is the POTW's sampling equipment properly maintained?	Yes X	No
13.	Is the POTW keeping proper field notes and chain of custody receipts?	Yes X	No
14.	Is the sampling location representative of the discharge to the collection system?	Yes X	No
15.	Has the POTW verified that the sampling locations are representative?	Yes X	No
16.	Are the sampling locations identified in the IU file?	Yes X	No
17.	Are sampling services readily available in an emergency situation?	Yes X	No
18.	Has the POTW established an enforcement management system to track receipt and review of:		
	· self-monitoring reports	Yes X	No
	· semi-annual reports	Yes X	No
	· BMR's	Yes X	No
	· 90-day compliance reports	Yes X	No
	· progress reports	Yes X	No
	· bypass reports	Yes X	No
19.	Does the POTW verify that results for all regulated parameters are reported by the IU's in their self-monitoring reports?	Yes	No N/A
20.	Does the POTW verify that the BMR's submitted by IUs contain all of the information required by 40 CFR 403.12(b)?	Yes X	No
	(a) Name and address	Yes X	No
	(b) Environmental control permits held	Yes X	No
	(c) Description of operations and process flow diagrams	Yes X	No
	(d) Flow measurements	Yes X	No
	(e) Measurements of regulated pollutants	Yes X	No

(f) Certification of compliance/noncompliance Yes X No _____
(g) Compliance Schedule Yes X No _____

E. Enforcement

1. Has the POTW implemented an enforcement response system to adequately address every IU violation of pretreatment? Yes X No _____

(a) violations of effluent limitations Yes X No _____
(b) failure to submit required reports Yes X No _____
(c) unpermitted discharges Yes X No _____

An "Enforcement Response Plan" must be developed by the municipality per 40 CFR 403.8(f)(5) (Reference FR 24 July 1990, 30121 - 30123). Please comment on the status of development.

2. Is the list of Significant Violating IU's published by the POTW developed in accordance with criteria per 40 CFR 403.8(f)(2)(viii) ("Domestic Sewage Study" regulations promulgated FR 24 July 1990, 30123 - 30126)? Yes X No _____

3. Has the POTW taken formal enforcement against all significantly violating IU's? Yes X No _____

If no, explain _____

4. Has the POTW established an enforceable compliance schedule for all significantly violating IUs which need construction of additional treatment facilities to comply with the standards? Yes X No _____

If so, list those categorical IUs under construction schedule:

NAME	CATEGORY	FINAL COMPLIANCE DATE
Materion Corp.	421/471	Jan 23, 2012

5. Additional comments on the POTW's enforcement procedure:

F. POTW's Pretreatment Organization Structure

1. Is the pretreatment program organization structure the same as presented in the approved pretreatment program? Yes X No _____

2. Are staffing levels adequate to meet the needs of the program? Yes X No _____

If no, explain: _____

3. Are the responsible officials familiar with the approved pretreatment program requirements? Yes X No _____

G. **Multijurisdictional Issues**

1. Does the POTW have copies of permits for IU's in customer cities ? Yes X No _____

2. Does the annual list published by the POTW of Significantly Violating IU's include the IU's in customer cities? Yes X No _____

3. Are the current multijurisdictional contracts appropriate for the implementation of the pretreatment program? Yes X No _____

If no, explain _____

H. **Additional Comments**

The Albuquerque Bernalillo County Water Utility Authority (ABCWUA) oversees both drinking water and wastewater operations in the city of Albuquerque. ABCWUA uses ferric chloride in the drinking water treatment process for coagulation purposes, using about 32,000 gallons per month. The Authority also uses ferrous chloride in the sanitary sewers for odor control. Ferrous is injected at six locations throughout the city. As of the date of this inspection, the inspectors were informed that the Authority had conducted a study over the summer that showed ferric chloride did a similar job of odor control as ferrous chloride, and were in the process of changing over all of the odor control chemicals to ferric chloride.

On September 10th, a tank at Station 70 cracked and ruptured. The leak was not discovered until Monday morning the 12th when Groendyke (the company that delivers the ferric chloride) staff showed up at the facility to deliver railcars full of ferric chloride. The Groendyke staff notified ABCWUA staff, who then showed up on site about an hour later.

The ferric chloride storage facility ("Station 70") is set up so that four 20,000 gallon capacity tanks of ferric chloride are on the east side of the facility, and four 20,000 gallon capacity tanks of ferrous chloride are on the west side of the facility. The tanks are surrounded by a concrete block wall, with no roof. In the floor of the facility is a grated floor drain that is connected directly to the sanitary sewer. The ferric tanks (on the water side) are run in parallel ("floating"), so when the tank cracked, the tank was pressurized by the remaining three tanks. The crack in the tank was 24 inches, and stopped about three feet from the bottom of the tank. (Please see Photo #1). On September 10th, these tanks had approximately 17,000 gallons of ferric chloride each.

When the leak was discovered on Monday, the individual tanks were isolated, leaving about 8,000 gallons in each tank, except for the cracked tank, which was allowed to leak to the point below the crack in the tank. This resulted in about 5,600 gallons being left in the damaged tank. ABCWUA staff called in an independent inspection company to inspect the damaged tank, and in preparation for that inspection, the remaining 5,600 gallons of ferric chloride in the damaged tank was dumped into the sewer on September 13th, with no notification to the WWTP. It is estimated that approximately 44,000 gallons of ferric chloride was discharged to the sewer system from September 10th to September 13th. The WWTP did experience noncompliance as a result of this discharge. The pH at the outfall dipped below the permit limit of 6.6 S.U. for three days (September 12th-14th; 5.74, 6.17, and 6.38, respectively.) The WWTP also experienced noncompliance with regard to their total ammonia limit. The permit limit was 1.5 mg/L, and the plant effluent reading for September 12th was 1.88 mg/L. As a result of conditions seen at the plant, air was increased in the aeration basins, which resulted in an exceedance of the plant's total inorganic nitrogen limit with a reading of 16.3 mg/L.

The pretreatment program never considered Station 70 a potential threat, so it had not been permitted as of the date of this inspection. The valve to the sanitary sewer has been shut off since this incident. According to pretreatment staff, the water employees did not notify pretreatment staff of the discharge. Pretreatment staff found out that the plant was experiencing issues Monday morning from observations of the primary clarifiers and sent staff out into the field to sample at manholes and identify the source of the discharge. By Monday evening, pretreatment staff had narrowed down the discharge to Station 70. At that point, the pH in the manhole downstream of Station 70 was at 1.5 S.U. pH levels all the way down to the plant had not risen above 3.0 S.U.

The independent inspectors that ABCWUA brought in to investigate the tank rupture were not able to come to a conclusion about why the tank ruptured. The tanks are fiberglass, and coated with a material to discourage disintegration by the sun – all the tanks are exposed to the elements. ABCWUA staff indicated that no tank inspections had been performed on the tanks since Station 70 was placed into service in 2004.

While speaking with ABCWUA water staff on the day of the inspection, it was noted that there was an option to transfer the remaining 5,600 gallons of ferric chloride to a tanker truck, but the operator chose to discharge the material as a slug load to the sanitary sewer. The water staff did not seem to be aware of the pretreatment program and the requirements to prevent industrial discharges from affecting the wastewater plant. Pretreatment staff and/or collections system staff were not notified of the discharge. Because the ferrous chloride was used in the sewer system anyway, water staff appeared to believe that this discharge of ferric chloride would not adversely affect the system.

Water staff also noted that this was not the first time this type of discharge has occurred to the sewer system. It was noted that in 2008 or 2009, a metal coupling failed in the vicinity of a sanitary sewer drain, and a similar spill occurred, which resulted in negative effects on the wastewater treatment plant.

In Part III.D.7.a, ABCWUA's NPDES permit states that:

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall by provided within 5 days of the time the permittee becomes aware of the circumstances.

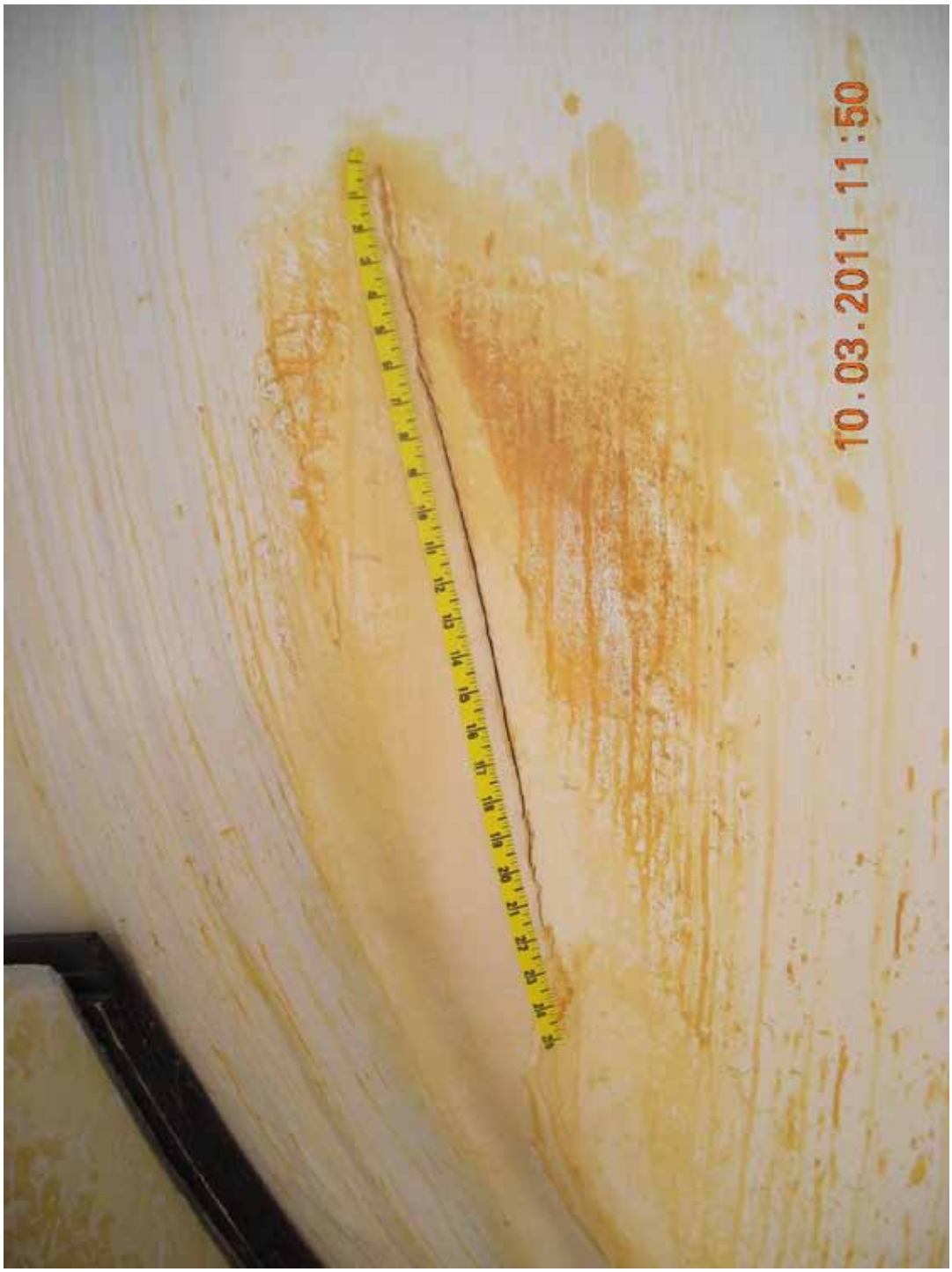
ABCWUA did not provide oral notification to NMED or EPA regarding the spill, and sent in the written report, which was received by NMED on 9-26-2011, fourteen days after becoming aware of the spill.

NMED/SWQB

Official Photograph Log

Photo # 1

Photographer: Sarah Holcomb	Date: 10-3-2011	Time: 1150 hours
City/County: Albuquerque/Bernalillo County		
Location: Station 70, near Paseo del Norte and Edith Blvd., in Albuquerque		
Subject: Damaged ferric chloride tank which resulted in an approximate 44,000 gallon discharge of ferric chloride to the sanitary sewer.		



NMED/SWQB

Official Photograph Log

Photo # 2

Photographer: Sarah Holcomb	Date: 10-3-2011	Time: 1156 hours
City/County: Albuquerque/Bernalillo County		
Location: Station 70, near Paseo del Norte and Edith Blvd., in Albuquerque		
Subject: Floor drain which leads directly to the sanitary sewer from Station 70. Water on the floor of facility at the time of the inspection was from a hose that had been running on the floor of the facility.		

NMED/SWQB

Official Photograph Log

Photo # 3

Photographer: Sarah Holcomb	Date: 10-3-2011	Time: 1215 hours
City/County: Albuquerque/Bernalillo County		
Location: Station 70, near Paseo del Norte and Edith Blvd., in Albuquerque		
Subject: Aerial view of Station 70 set-up.		

NMED/SWQB

Official Photograph Log

Photo # 4

Photographer: Sarah Holcomb	Date: 10-3-2011	Time: 1140/1141 hours
City/County: Albuquerque/Bernalillo County		
Location: Station 70, near Paseo del Norte and Edith Blvd., in Albuquerque		
Subject: Valve located outside the containment walls of Station 70 that must be opened to discharge anything to the sanitary sewer.