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NEW MEXICO
ENVIRONMENT DEPARTMENT
Surface Water Quality Bureau

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DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

Certified Mail - Return Receipt Requested

May 25, 2011

Bob Horacek, City Manager
City of Grants
P.O. Box 879
Grants, New Mexico

RE: Minor Industrial, NPDES Reconnaissance Inspection, City of Grants / Riverwalk Park Fountain and Ponds, NMU001732, May 23, 2011

Dear Mr. Horacek,

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) conducted 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.

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. Further, you are encouraged to notify in writing, both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency
Allied Bank Tower
Region VI Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Program Manager
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

I appreciate Anthony Martinez and your cooperation during the inspection. If you have any questions about this inspection report, please contact me at (505) 827-0418.

Sincerely,

/s/ Erin S. Trujillo

Erin S. Trujillo
Surface Water Quality Bureau

cc: Marcia Gail Adams, USEPA (6EN-AS) by e-mail
Samuel Tates, EPA (6EN-AS) by e-mail
Carol Peters-Wagon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6WQ-PP) by e-mail
Jennifer Ickes, NMED District I Manager by e-mail
Anthony J. Martinez, Grants Project Manager, CH2M HILL OMI by e-mail



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

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 U 0 0 1 7 3 2 11 12 1 1 0 5 2 3 17 18 R 19 S 20 1					
Remarks					
U N P E R M I T T E D D I S C H A R G E					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 1	71 N	72 N	73	74 75 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) City of Grants Riverwalk Park, 400 West High Street, Grants, New Mexico, 87020 fountain (southwest corner of West Santa Fe Avenue and 5 th Street) and ponds (northwest of 4 th Street and W. Stephens Avenue) in Grants, New Mexico. Cibola County	Entry Time /Date 1030 hours / 05/23/2011	Permit Effective Date Unpermitted Discharge
	Exit Time/Date 1237 hours / 05/23/2011	Permit Expiration Date Unpermitted Discharge
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) -Anthony J. Martinez / Grants Project Manager, CH2M HILL OMI / 505-287-2908 -Wayne Duran, Park Supervisor, CH2M HILL OMI	Other Facility Data Overflows Lat N. 35.152316°, Long -107.854397°	
Name, Address of Responsible Official/Title/Phone and Fax Number Bob Horacek, City Manager, City of Grants, City of Grants, P.O. Box 879 Grants, New Mexico 87020 / 505-287-7927 and fax 505-287-7502	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Lat 35.154214°, Long -107.851400°		

Section C: Areas Evaluated During Inspection

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

U	Permit	N	Flow Measurement	N	Operations & Maintenance	N	CSO/SSO
N	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)

1. SEE ATTACHED FURTHER EXPLANATIONS AND PHOTO LOG.

Name(s) and Signature(s) of Inspector(s) Erin S. Trujillo /s/ Erin S. Trujillo	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0418	Date May 25, 2011
Signature of Management QA Reviewer Richard E. Powell /s/ Richard E. Powell	Agency/Office/Phone and Fax Numbers NMED/SWQB/505-827-2798	Date May 25, 2011

City of Grants Riverwalk Park Fountain and Ponds
NPDES Tracking No. NMU001732
Reconnaissance Inspection
May 23, 2011

Further Explanations

Introduction

On May 23, 2011, Erin Trujillo, accompanied by Daniel Valenta, both of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Reconnaissance Inspection at the Riverwalk Park, 400 West High Street, Grants, New Mexico along the Rio San Jose in Cibola County. The purpose of this inspection was to document the compliance of City of Grant's pumping of groundwater from a well into a park fountain and ponds that overflow into the Rio San Jose under 40 Code of Federal Regulations (CFR) Part 122 and National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act. This inspection followed observations of flow in the stream by the NMED Monitoring and Assessment (MAS) staff during the ongoing 2011 water quality survey of the Rio Puerco Basin.

Discharges are to Rio San Jose, an unclassified segment of the *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*, thence to Rio Puerco, thence to the Rio Grande. The segment of the Rio San Jose downstream of the park near the City of Grants former waste water treatment plant is noted to be intermittent per the U.S. Environmental Protection Agency (USEPA) Region VI instructions and includes the designated uses of livestock watering, marginal warmwater aquatic life, primary contact, and wildlife habitat at this time.

The inspectors arrived at the Riverwalk Park "Flight over the Malpais" sculpture fountain at the southwest corner of 5th Street and West Santa Fe Avenue at approximately 1030 hours on the day of this inspection. After observing overflow from the fountain entering into the Rio San Jose that runs along the western boundary of the park, the inspectors arrived at the City Hall at 600 West Santa Fe Avenue at approximately 1050 hours. The inspector made introductions, explained the purpose of the inspection and presented credentials to Mr. Bob Horacek, City Manager. The inspectors then met with Mr. Anthony J. Martinez, Grants Project Manager, CH2M HILL Operations Management International, Inc. (OMI) offices at 121 Wayne Avenue. The inspector made introductions and explained the purpose of the inspection to Mr. Martinez. City of Grants has contracted with OMI to provide parks and grounds maintenance. The inspectors and Mr. Martinez toured the fountain and pond portions of the park facility. A preliminary exit interview was conducted with Mr. Martinez at the end of the tour. The inspectors left the park facility at approximately 1237 hours on the day of the inspection. Mr. Horacek was unavailable for a preliminary exit interview when the inspectors left the park facility.

This inspection report is based on information provided by the operator's representatives, observations made by the NMED inspectors, and records and reports kept by the operator and/or NMED. Additional information on the groundwater well and meter readings was obtained from readily available information on New Mexico Office of the State Engineer (NMOSE) website. Mr. Martinez provided additional information by phone and e-mail on May 24, 2011.

Riverwalk Park Fountain and Ponds Discharge

A groundwater well drilled in the southwest corner of 5th and West Santa Fe Avenue for the City of Grants to supply water for landscape watering was finished on May 3, 1990 to a depth of 314 feet. The completed well was indicated to be artesian with a depth of water upon completion of zero (0) feet. The well has a bleeder pipe at the surface to divert flow during pump or well maintenance.

Groundwater is pumped to an on-site building that contains a water meter. The locked building with the meter and distribution pipes could not be opened by the operator's on-site representative on the day of the inspection. From this building, flow enters PVC pipes with outlets on a manmade rock structure fountain. The fountain has a spillway and flow from the fountain directly entered the Rio San Jose on the day of this inspection.

Groundwater from the well is also piped to two manmade ponds downstream and adjacent to the Rio San Jose. The park's ponds are stocked with fish and aerated to help control algae. On occasion, blue dye is added to pond for appearance. The first or southern pond has a spillway channel that allows flow to enter the second or northern pond. Overflow from the second pond directly entered the Rio San Jose on the day of this inspection. A retaining wall, approximately one-foot high, across the stream channel at the northern end of the park, raises the water level in the stream. Water in the stream enters an inlet and can be pumped through a recirculation pipe system either to the ponds or back to the fountain. The City no longer uses re-circulated water for landscape watering.

It was noted that flow from two of the observed pipes in the fountain felt cool, while one felt warm on the day of the inspection. The City's representatives stated that flow from the groundwater well directly into the fountain was generally warmer than the re-circulated groundwater water from the stream.

Estimated Flow

The amount of groundwater pumped from the well varies. A summary of meter readings reported to the NMOSE and converted gallons is provided below. Evaporation or possible infiltration from the fountain and ponds would reduce the amount of groundwater that actually flows into the stream.

City of Grants Well B00039			
Date	Meter Reading	Difference	x 100 = Gallons
12/01/2009	103851		
01/01/2010	104271	420	42,000 Gallons
02/01/2010	118164	13893	1,389,300 Gallons
03/01/2010	155219	37055	3,705,500 Gallons
04/01/2010	201104	45885	4,588,500 Gallons
05/01/2010	246547	45443	4,544,300 Gallons
06/01/2010	287067	40520	4,052,000 Gallons
07/01/2010	307604	20537	2,053,700 Gallons
08/01/2010	352325	44721	4,472,100 Gallons
11/01/2010	405404	53079	5,307,900 Gallons
12/01/2010	405404	0	-
01/01/2011	505997	100593	10,059,300 Gallons
02/01/2011	634587	128590	12,859,000 Gallons
03/01/2011	751800	117213	11,721,300 Gallons
04/01/2011	880041	128241	12,824,100 Gallons

City of Grants Well B00039		
Year to Date	Acre Feet	Gallons
2000	49.001	15,967,045.87
2001	36.261	11,815,698.67
2002	32.771	10,678,477.18
2003	22.902	7,462,649.43
2004	31.281	10,192,958.55
2005	33.306	10,852,807.69
2006	160.216	52,206,612.55
2007	428.246	139,544,571.06
2008	514.536	167,662,290.87
2009	198.64	64,727,127.86
2011	114.79	37,404,485.53
2010	123.286	40,172,919.28

Note: 1 acre foot = 325,851.429 US gallons

Clean Water Act and NPDES Requirements

Section 301 of the Federal Clean Water Act states:

Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful.

40 CFR 122.1(b) states, “*The NPDES program requires permits for the discharge of “pollutants” from any “point source” into “waters of the United States.”*” The terms “pollutant”, “point source” and “waters of the United States” are defined at §122.2.

40 CFR 122.21(a) states, “*Duty to apply. Any person who discharges or proposes to discharge pollutants”.... “shall submit a complete application (which shall include a BMP program if necessary under 40 CFR 125.102) to the Director in accordance with this section and part 124.”*”

Findings

Permit – Overall Rating of “U = Unsatisfactory”

An NPDES permit has not been obtained for the discharge of groundwater and occasionally chemically treated groundwater water (dyes) from a fountain and ponds that overflow into the Rio San Jose. Based on conversations with the City Manager, the City was unaware of the need for a permit. Contact information for USEPA Region 6 NPDES Permit Coordinator for New Mexico was provided to Mr. Martinez on May 24, 2011.

Facility Site Review – Overall Rating of “U = Marginal”

Trash was observed at the second pond overflow location. There was no velocity dissipation or other structures to minimize erosion at the second pond overflow.

Effluent/Receiving Waters – Overall Rating of “U = Unsatisfactory”

Excessive algal growth was observed in the Rio San Jose downstream of the overflows which may indicate high nutrient levels in the stream. Nutrient analytical results of water quality samples collected from the Rio San Jose at the park on May 17, 2011 by NMED MAS are not available at the writing of this report. City of Grants has not tested the groundwater from Well B00039. Sources of nutrients in streams can be from nonpoint (dispersed, both human and natural sources) and point-source discharges.

True Blue™ EZ Solupak by Precision Laboratories, Inc. used in the ponds contains blue and yellow colorants, disodium salt, polymer and solids according to the material safety data sheet available at http://www.precisionlab.com/itemimages/TRUE_BLUE_EZ_MSDS.PDF. The colorant reduces sunlight penetration that would nourish algae and add a blue color. Product information from Precision Laboratories, Inc. at <http://www.precisionlab.com/ProductSelect.pli?Parent=431-WS> states, “Do NOT use this product for streams, rivers or other bodies of water not under the control of the user.”

If not managed in accordance with a NPDES permit, groundwater discharge from the Riverwalk fountains and parks may be a potential threat to surface water quality.

**NMED/SWQB
Official Photograph Log
Photo # 1**

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1031 hours
City/County: Grants / Cibola		State: New Mexico
Location: Rio San Jose		
Subject: Stream channel upstream from railroad underpass and City of Grants Riverwalk Park		



**NMED/SWQB
Official Photograph Log
Photo # 2**

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1030 hours
City/County: Grants / Cibola		State: New Mexico
Location: Rio San Jose		
Subject: Standing water in Rio San Jose under railroad underpass south of the fountain overflow at Riverwalk Park.		



NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1037 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Riverwalk Park		
Subject: Algal growth in fountain. Arrows point to location of pipes in fountain with flow.		



NMED/SWQB
Official Photograph Log
Photo # 4

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1044 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Rio San Jose at Southern end of Riverwalk Park		
Subject: Overflow from fountain into Rio San Jose.		



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1217 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Riverwalk Park		
Subject: Second pond. Arrow points to channel from first pond with flow entering second pond.		



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1218 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Riverwalk Park		
Subject: Overflow from second pond into Rio San Jose. Trash and some erosion was observed at this location.		



**NMED/SWQB
Official Photograph Log
Photo # 7**

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1229 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Rio San Jose at Northern End of Riverwalk Park		
Subject: Excessive algal growth in stream at southern end of park. Banks of stream have been stabilized.		



**NMED/SWQB
Official Photograph Log
Photo # 8**

Photographer: Erin S. Trujillo	Date: 05/23/2011	Time: 1230 hours
City/County: Grants / Cibola	State: New Mexico	
Location: Rio San Jose		
Subject: Flow in stream channel downstream from City of Grants Riverwalk Park. Channel banks and bed had recently been cleared of vegetation by the City.		

