



NEW MEXICO  
ENVIRONMENT DEPARTMENT



*Surface Water Quality Bureau*

SUSANA MARTINEZ  
Governor  
JOHN SANCHEZ  
Lieutenant Governor

Harold Runnels Building, N2050  
1190 South St. Francis Drive (87505)  
P.O. Box 5469, Santa Fe, NM 87502-5469  
Phone (505) 827-0187 Fax (505) 827-0160  
[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)

DAVE MARTIN  
Secretary  
RAJ SOLOMON, P.E.  
Deputy Secretary

---

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

March 7, 2011

Mr. Reyes Romero, Deputy State Fire Marshal  
New Mexico Firefighters Training Academy  
600 Aspen Road  
P.O. Box 239  
Socorro, New Mexico 87801

**RE: Minor Non-Municipal, SIC 9224, NPDES Compliance Evaluation Inspection, New Mexico Firefighters Training Academy, NM0029726, February 22, 2011.**

Dear Mr. Reyes:

Enclosed, please find a copy of the report 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.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. 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 and compliance schedules.

If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2798.

Sincerely,

Richard E. Powell  
Surface Water Quality Bureau

CC: Samuel Bates, USEPA (6EN-AS) by email  
Carol Peters-Wagnon, USEPA (6EN-WM) by email  
Marcia Gail Adams, USEPA (6EN-AS) by email  
Diana McDonald, USEPA (6EN-WM) by email  
Larry Giglio, USEPA (6EN-P) by email  
NMED, District I Albuquerque by email



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 0 0 2 9 7 2 6 11 12 1 1 0 2 2 2 17 18 C 19 S 20 2					
Remarks					
N M F I R E F I G H T E R S T R A I N I N G					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 4	71 N 72 N 73	74 75	M I N 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) NEW MEXICO FIREFIGHTERS TRAINING ACADEMY, 600 ASPEN ROAD, SOCORRO, NEW MEXICO. FROM I-25 IN SOCCORO, TAKE EXIT 150. CONTINUE TO FOLLOW BUSINESS I-25 TO US-60 WEST. TURN RIGHT AT SPRING STREET. CONTINUE TO FOLLOW SPRING STREET AND TURN RIGHT AT ASPEN ROAD TO ACADEMY. SOCORRO COUNTY	Entry Time /Date 1000/2-22-11	Permit Effective Date 7-1-09
	Exit Time/Date 1205/2-22-11	Permit Expiration Date 6-30-14
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) MR. JOEY ANAYA/PLANT SYSTEMS OPERATOR/575-835-7503	Other Facility Data	
Name, Address of Responsible Official/Title/Phone and Fax Number MR. REYES ROMERO, NEW MEXICO FIREFIGHTERS TRAINING ACADEMY, 600 ASPEN ROAD, P.O. BOX 239, SOCORRO, NEW MEXICO 87801/DEPUTY STATE FIRE MARSHAL/575-835-7503 AND FAX 575-835-7506	Outfall 001 Latitude 34.058242° Longitude -106.919018° SIC 9224	
	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)

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

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

1. SEE ATTACHED REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) /s/ RICHARD E. POWELL	Agency/Office/Telephone/Fax NMED/SWQB/505-827-2798	Date 3-7-11
Signature of Management QA Reviewer /s/ STEVEN M. BAUMGARN	Agency/Office/Phone and Fax Numbers NMED/SWQB/575-647-7981	Date 3-7-11

**SECTION A - PERMIT VERIFICATION**

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS DETAILS:  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)

- 1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE  Y  N  NA
- 2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES  Y  N  NA
- 3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT  Y  N  NA
- 4. ALL DISCHARGES ARE PERMITTED  Y  N  NA

**SECTION B - RECORDKEEPING AND REPORTING EVALUATION**

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT. DETAILS: *No discharges since permit re-issued.*  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)

- 1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRS.  Y  N  NA
- 2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.  S  M  U  NA
  - a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING  Y  N  NA
  - b) NAME OF INDIVIDUAL PERFORMING SAMPLING  Y  N  NA
  - c) ANALYTICAL METHODS AND TECHNIQUES.  Y  N  NA
  - d) RESULTS OF ANALYSES AND CALIBRATIONS.  Y  N  NA
  - e) DATES AND TIMES OF ANALYSES.  Y  N  NA
  - f) NAME OF PERSON(S) PERFORMING ANALYSES.  Y  N  NA
- 3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.  S  M  U  NA
- 4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.  S  M  U  NA
- 5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.  Y  N  NA

**SECTION C - OPERATIONS AND MAINTENANCE**

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED. DETAILS: *Small spill by fuel recycle line needs to be cleaned up.*  S  M  U  NA (FURTHER EXPLANATION ATTACHED YES)

- 1. TREATMENT UNITS PROPERLY OPERATED.  S  M  U  NA
- 2. TREATMENT UNITS PROPERLY MAINTAINED.  S  M  U  NA
- 3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.  S  M  U  NA
- 4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.  S  M  U  NA
- 5. ALL NEEDED TREATMENT UNITS IN SERVICE  S  M  U  NA
- 6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.  S  M  U  NA
- 7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.  S  M  U  NA
- 8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. *Oil/water separator O&M manual maintained on-site*  Y  N  NA  
 STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. *SOP for sampling. Oil/water separator had schedules*  Y  N  NA  
 PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.  Y  N  NA

**SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)**

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?  Y  N  NA  
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?  Y  N  NA  
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?  Y  N  NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?  Y  N  NA  
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?  Y  N  NA

**SECTION D - SELF-MONITORING**

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO \_\_).  
 DETAILS: *No discharges since permit re-issued.*

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT. *Primary – outfall 001, Secondary – outfall 002*  Y  N  NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.  Y  N  NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.  Y  N  NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.  Y  N  NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.  Y  N  NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE. *Have written SOPs*  Y  N  NA

a) SAMPLES REFRIGERATED DURING COMPOSITING.  Y  N  NA

b) PROPER PRESERVATION TECHNIQUES USED.  Y  N  NA

c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3. *Supplied by laboratory*  Y  N  NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?  Y  N  NA

**SECTION E - FLOW MEASUREMENT**

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)  
 DETAILS: *No discharges since permit re-issued.*

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.  Y  N  NA  
 TYPE OF DEVICE *Not Required*

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED. *Permit requires estimate.*  Y  N  NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.  Y  N  NA

4. CALIBRATION FREQUENCY ADEQUATE.  Y  N  NA  
 RECORDS MAINTAINED OF CALIBRATION PROCEDURES.  Y  N  NA  
 CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.  Y  N  NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE. *No Flow/No Discharge*  Y  N  NA

6. HEAD MEASURED AT PROPER LOCATION.  Y  N  NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.  Y  N  NA

**SECTION F – LABORATORY**

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO)  
 DETAILS: *No discharges since permit re-issued.*

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)  Y  N  NA

**SECTION F - LABORATORY (CONT'D)**

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED  Y  N  NA
3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT.  S  M  U  NA
4. QUALITY CONTROL PROCEDURES ADEQUATE.  S  M  U  NA
5. DUPLICATE SAMPLES ARE ANALYZED. \_\_\_\_\_ % OF THE TIME.  Y  N  NA
6. SPIKED SAMPLES ARE ANALYZED. \_\_\_\_\_ % OF THE TIME.  Y  N  NA
7. COMMERCIAL LABORATORY USED.  Y  N  NA

LAB NAME *Hall Environmental Analysis Laboratory*  
 LAB ADDRESS *4901 Hawkins NE, Albuquerque, NM 87109*  
 PARAMETERS PERFORMED *ALL*

**SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS.**  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	No Flow						
002	No Outfall/No Flow						

RECEIVING WATER OBSERVATIONS: Unnamed arroyo was dry.

**SECTION H - SLUDGE DISPOSAL**

- SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS.  S  M  U  NA (FURTHER EXPLANATION ATTACHED NO).  
 DETAILS:
1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY.  S  M  U  NA
2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503.  S  M  U  NA
3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: \_\_\_\_\_ (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

**SECTION I - SAMPLING INSPECTION PROCEDURES** (FURTHER EXPLANATION ATTACHED NO).

1. SAMPLES OBTAINED THIS INSPECTION.  Y  N  NA
2. TYPE OF SAMPLE OBTAINED  
 GRAB \_\_\_\_\_ COMPOSITE SAMPLE \_\_\_\_\_ METHOD \_\_\_\_\_ FREQUENCY \_\_\_\_\_
3. SAMPLES PRESERVED.  Y  N  NA
4. FLOW PROPORTIONED SAMPLES OBTAINED.  Y  N  NA
5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE.  Y  N  NA
6. SAMPLE REPRESENTATIVE OF VOLUME AND MATURE OF DISCHARGE.  Y  N  NA
7. SAMPLE SPLIT WITH PERMITTEE.  Y  N  NA
8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED.  Y  N  NA
9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT.  Y  N  NA

**Compliance Evaluation Inspection  
New Mexico Firefighters Training Academy  
NPDES Permit #NM0029726, February 22, 2011**

**Further Explanations**

**Introduction**

On February 22, 2011, Richard E. Powell of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the New Mexico Firefighters Training Academy at 600 Aspen Road in Socorro, Socorro County, New Mexico. The New Mexico Firefighters Training Academy is classified as a minor industrial discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0029726 which regulates discharge of treated effluent from Outfall 001 and 002 to an unclassified dry arroyo, thence to a diversion channel and to the Rio Grande in Segment 20.6.4.105 *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code* (NMAC).

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with the NPDES permit. This inspection report is based on information provided by the permittee's on-site representatives, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

An entrance interview was conducted with Messrs. Reyes Romero, Deputy State Fire Marshal and Joey Anaya, Plant Systems Operator, at approximately 1000 hours on February 22, 2011. The inspector made introductions, presented his credentials and discussed the purpose of the inspection.

**Treatment Scheme**

The New Mexico Firefighters Training Academy was created as a part of the State Fire Marshal's Office and opened in January 1989. The facility offers year round courses ranging from entry-level to advanced management for chief officers. In addition to hands-on fire suppression, courses are conducted in various technical rescue, auto extrication, hazardous materials, and arson investigation. Specialized burn props are used on concrete burn pads or in buildings within the asphalt paved areas of the facility.

The facility has four separate concrete pads. The pads are bermed and sloped toward an underground pipe system. A flammable liquid pad and liquid petroleum gas pad are currently used in firefighting scenarios. Diesel and "Micro-Blaze", a surfactant foaming agent, is used to set and extinguish training fires at the liquefied petroleum gas pad. Fire suppression is not conducted at the pseudo hazmat pad and fourth pad.

Diesel is used to light pallets on fire in the Burn Building. After extinguishing the fire, ash and cinders are flushed through cut drainage holes in Burn Building to the paved areas. The paved area is sloped to drain toward a grate above the underground pipe system. This grate would also receive storm water runoff.

The pipe system leads to a foam separator and an oil and water separator before continuing to two lined and aerated lagoons (primary and secondary lagoon). The capacity of the primary and secondary lagoons is 0.5 million gallons and 1 million gallons, respectively, according to the permittee's on-site

representative. The primary or north lagoon receives wastewater created from the firefighting activities. The secondary or south lagoon receives gravity overflow from the primary lagoon, potable water from hose training exercises, make-up potable water and occasionally pumpage from the primary lagoon when it is drained and cleaned. Potable water is supplied from the City of Socorro.

Sediments in the water are allowed to settle in the lagoons before the water is pumped from the secondary lagoon and reused in training exercises. Wastewater in the secondary lagoon has also been land applied to on-site fields. The permittee has applied for a NMED Ground Water Quality Bureau Discharge Permit for additional discharges to on-site fields. Once this permit is approved, the permittee may land apply all effluent and may then decide to terminate the NPDES permit.

A concrete outfall structure for Outfall 001 is located on the northeast side of the primary lagoon. No discharges into the receiving stream have been reported to have occurred from Outfall 001. The NPDES permit authorizes discharges from Outfall 002 from the secondary lagoon, but no outfall structure has been installed. No discharges into the receiving stream have been reported to have occurred from the secondary lagoon.

### **Section C – Operations and Maintenance – Overall Rating of “Satisfactory”**

Discharges from one of the burn pads (liquid petroleum gas pad) flow directly to the primary lagoon. These flows are filtered by a screen. The ash residue is shoveled out, placed into 55-gallon drums and disposed by Advanced Environmental in Belen, NM. Other burn area discharges are directed through a foam separator, then an oil/water separator then to the primary lagoon. Residual fuel from the oil/water separator is recycled for use in future burns. There was a small area of oil/fuel contaminated soil under the pipe that carries recycled fuel from the oil/water separator on the date of this inspection. The contaminated soil needs to be remediated and the pipe repaired. The oil/water separator is cleaned as needed, but at a minimum of 1/year and this waste is also disposed by Advanced Environmental.

The primary lagoon collects the vast majority of the residue from burn activities as well as sediment and other contaminants in storm water inflows. This lagoon is de-watered and cleaned out approximately 1/year. Residue is directed to a sump in the lagoon and is pumped out with a vac-truck and disposed by the City of Socorro. The secondary lagoon appeared to be quite clean on the date of this inspection.

An exit interview to discuss the findings of this inspection was conducted from approximately 1150 - 1200 hours on February 22, 2011 with Messrs. Romero and Anaya, at the site.