NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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Governor

JOHN A. SANCHEZ
Lieutenant Governor

DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

TOM SKIBITSKI
Acting Director
Resource Protection Division

February 5, 2013

Mr. David Atencio
Superintendent
Jemez Valley Public Schools
8501 Hwy 4
Jemez Pueblo, NM 87024

Re: Minor Industrial SIC 4952, NPDES Compliance Evaluation Inspection, Jemez Valley Schools, NM0028479, Sandoval County, New Mexico January 9, 2013.

Dear Mr. Atencio:
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 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, 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 your cooperation and the cooperation of the Jemez Valley Schools representatives Barbara Perry and Louis Gachupin during this inspection.

If you have any questions about this inspection report, please contact me at (505) 827-0212.

Sincerely,
/s/Barbara Cooney

Barbara Cooney
Surface Water Quality Bureau

cc: Hannah Branning, USEPA (6EN-AS) by e-mail
Darlene Whitten-Hill, USEPA (6EN-AS) by e-mail
Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Diana McDonald, USEPA (6EN-WM) by e-mail
Larry Giglio, USEPA (6EN-P) by e-mail
William Chavez, NMED District 1 Manager (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 0 0 2 8 4 7 9 11	12 1 3 0 1 0 9 17	18 C	19 S 20	2

Remarks: M I N 0 R I N D U S T R I A L W W T P

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67 1 69	70 2	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)* Jemez Valley Public Schools / 8501 Highway 4/ Jemez Pueblo, NM 87024

Driving Directions: From Rio Rancho go North on HWY 550 –21..2 miles to State Road NM 4 Turn Right – go 8.5 miles through Jemez Pueblo to Canon. The School's Administrative Offices are on the Left Side of the Road at the School

Sandoval County

Entry Time /Date: 11:50 / January 9, 2013

Exit Time/Date: 14:30 / January 9, 2013

Permit Effective Date: November 1, 2006

Permit Expiration Date: October 31, 2011

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Barbara Perry, Administrator (575) 834-7391
Louis Gachupin, Operator (575) 834-7391

Name, Address of Responsible Official/Title/Phone and Fax Number
Mr. David Attencio (575) 834-7391
Jemez Valley Public Schools
8501 Highway 4
Jemez Pueblo, NM 87024

Contacted: Yes [ ] No [*]

Other Facility Data

LAT 35° 39' 24"N
LONG -106° 44' 19"W

SIC 4952

Section C: Areas Evaluated During Inspection

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

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

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

SEE FURTHER EXPLANATIONS SECTION OF THIS REPORT FOR DETAILS

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/s/ Barbara Cooney	NMED/SWQB 505-827-0212 Fax 505-8270160	*5/02/2013*
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date** *5/02/2013*
/s/ Richard Powell	505- 827-2798	

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

Jemez Valley Schools	PERMIT NO. NM0028479

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS ☒ S ☐ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED No*)

DETAILS: The permit expired October 31, 2011 and has been administratively extended by the EPA.

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. ☐S ☒ M ☐ U ☐ NA (*FURTHER EXPLANATION ATTACHED Yes*)
DETAILS: Some sample collection information is missing.

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 Sample location not clearly written. ☐ 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. ☐ S ☐ M ☒ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes)*
DETAILS:

1. TREATMENT UNITS PROPERLY OPERATED. ☒ S ☐ M ☐ U ☐ NA

2. TREATMENT UNITS PROPERLY MAINTAINED. Chlorination and De-Chlorination not monitored regularly chemical tablets not added regularly ☐ 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
Alarm is a flashing light that no one would see unless they are at the WWTP. Operator checks WWTP daily.

5. ALL NEEDED TREATMENT UNITS IN SERVICE. ☒ S ☐ M ☐ U ☐ NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED. One trained and certified operator. There is no back up operator. ☐ S ☒ M ☐ U ☐ NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED. Some parts are on site but most would have to be ordered for replacement. ☐S ☒ M ☐ U ☐ NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE. ☐ Y ☒ N ☐ NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. ☐ Y ☒ N ☐ NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. ☐ Y ☒ N ☐ NA

Jemez Valley Schools	PERMIT NO. NM0028479

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 Yes__).*
DETAILS:

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.	☒ 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	☒ 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.	☒ 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 Yes)*
DETAILS: Flow measurements are essentially an estimate. A hand held rule w/ a square weir box is the official method. However – Operator stated that he does not need to use any measurement tools he can estimate flow by looking at it. The estimate is what is recorded on DMRs and used for loading calculations.

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE	☐ Y ☒ N ☐ NA
2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.	☒ Y ☐ N ☐ NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED.	☐ Y ☒ N ☐ NA
4. CALIBRATION FREQUENCY ADEQUATE. *(DATE OF LAST CALIBRATION* No Calibrations)	☐ 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.	☒ 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 Yes)*
DETAILS:

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

Jemez Valley Schools	PERMIT NO. NM0028479

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
Chlorine buffer is expired, pH meter not stored correctly

4. QUALITY CONTROL PROCEDURES ADEQUATE. ☐ S ☒ M ☐ U ☐ NA

5. DUPLICATE SAMPLES ARE ANALYZED. 10 % OF THE TIME. Commercial Lab Samples duplicated no duplicates for pH and TRC ☐ Y ☒ N ☐ NA

6. SPIKED SAMPLES ARE ANALYZED. 10 % OF THE TIME. ☐ Y ☒ N ☐ NA

7. COMMERCIAL LABORATORY USED. ☒ Y ☐ N ☐ NA

LAB NAME Hall Environmental Lab SLD
4901 Hawkins NE Suite D Albuquerque, NM
LAB ADDRESS Albuquerque, NM 87109 and

PARAMETERS PERFORMED BOD, TSS, E.coli

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☐S ☒ M ☐ U ☐ NA *(FURTHER EXPLANATION ATTACHED Yes).*

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
01	None	None	Slight	None	None	Slight grey/brown	NA

RECEIVING WATER OBSERVATIONS Exceedences for E. coli bacteria

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

Introduction

On January 9, 2013 a Compliance Evaluation Inspection (CEI) was conducted at the Jemez Valley Public Schools Wastewater Treatment Plant (WWTP) located in Canon, New Mexico by Barbara Cooney of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). The inspection was conducted by NMED for the US Environmental Protection Agency (USEPA), Region VI, under the NPDES permit program, in accordance with the Federal Clean Water Act. These inspections are conducted under contract with the USEPA and are used by EPA to evaluate compliance with the NPDES permit program. This inspection report is based on information supplied by the Jemez Valley Public School representatives (the permittee), observations made by the NMED inspector, reports and records kept by the permittee and/or NMED.

The Jemez Valley Public Schools Wastewater Treatment Plant is classified as a minor industrial discharge under the Federal Clean Water Act (CWA), section 402 National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0028479. The Standard Industrial Classification Code (SIC) is 4952. The facility has a design flow of 0.03 MGD. The discharge for the WWTP enters the Jemez River in Water Quality Segment 20.6.4.107 NMAC, at Latitude 35.95573 North, Longitude -106.73868 West. The Designated Uses for this segment of the river are: Coldwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

Inspection Details

The inspector arrived at the Jemez Valley Public Schools administrative office at 1150hours and met with Barbara Perry- Administrative Assistant to the Superintendent. An entrance interview was conducted with Ms. Perry. The inspector presented credentials and explained the purpose of the inspection. Mr. Louis Gachupin, WWTP Operator joined Ms. Cooney for the inspection of the WWTP. Directly following the inspection, Ms. Cooney met with Ms. Perry for a records review. An exit interview was held with Ms. Perry. The inspector left the site at 1430hours.

Treatment Scheme

The collection system serves the schools and does not include any additional residences or businesses. The teacher housing units are on a septic system according to Barbara Perry. In the collection system there is one lift station. From other points in the collection system and from the lift station, wastewater flows via gravity to the activated sludge package plant. The WWTP has five chambers: the influent enters the first chamber where solids are separated out and sent to the second chamber for sludge thickening. The liquids flow to the third chamber then to the forth chamber that serves as the two aeration basins. The aeration basins and the sludge thickener are fed by two blowers that alternate in a cycle of 6 hours on and 6 hours off, so each blower is rested for 14 hours a cycle. From the aeration basin, solids are pumped from the bottom of the chamber back to the sludge thickener. The liquids are decanted into the chlorine contact chamber for disinfection. Chlorine is added at the beginning of the chamber via a “dosing box” where tablets of Sodium Hypochlorite are fed. It is difficult to determine the detention time in the chlorine contact chamber. De-chlorination occurs past the chlorine contact chamber in the effluent line via a dispenser of Sodium Sulfite tablets. The flow continues approximately 30 feet to the Jemez River.

Sludge Handling

Solids are wasted from the secondary clarifier to the digester on a six hour cycle. Solids from the digester are removed by Vactor truck and hauled to the Albuquerque 2nd Street Reclamation facility for final disposal. The scrapings from the influent bar screen are dried and disposed of at the Sandoval County land fill after passing the paint filter test.

Further Explanations

Note: The sections are arranged according to the format of USEPA Form 3560-3 and checklist, attached, rather than being ranked in order of importance.

Permit Verification

Overall Rating For Permit Verification (Satisfactory)

The Permit Expired on October31, 2011 date and has been administratively extended by USEPA pending reissuance.

Record Keeping and Reporting

Overall Rating For Record Keeping and Reporting (Marginal)

Permit Requirements For Recordkeeping and Reporting

The permit requires in Part III.C. RETENTION OF RECORDS:

> *The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instruments, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the data of the samples, measurement, report, or application. This period may be extended by request of the Director at any time.*

The permit requires in Part III.C.4. RECORDS CONTENT:

> *Records of monitoring information shall include:*
> *a. The date, exact place, and time of sampling or measurements;*
> *b. The individual(s) who performed the sampling or measurements;*
> *c. The date(s) and time(s) analyses were performed;*
> *d. The individual(s) who performed the analyses;*
> *e. The analytical technique or methods used; and*
> *f. The results of such analyses.*

The permit requires in Part III.F. DEFINITIONS:

> 22. MUNICIPAL TERMS:
> *b. 30-DAY AVERAGE or MONTHLY AVERAGE, other than for fecal coliform bacteria, is the arithmetic mean of the daily values for all effluent samples collected during a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. The 30-day average for fecal coliform*

bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

Findings For Record Keeping and Reporting

1) Maintenance logs are kept on a calendar the operator carries with him, then transferred to a monthly/ daily log sheet. There is record of when samples are taken. However there are no records of when TRC and pH are analyzed. This could be addressed by including an additional column on the monthly/daily log sheet.

2) Total Residual Chlorine reported on the daily logs and the Scientific Laboratory Division (SLD) records do not match. The TRC noted on the laboratory record for E. coli sample taken 10/23/2012 is 0.26mg/L. The TRC being reported on the daily logs as 0.01mg/L and the Discharge Monitoring Reports (DMRs) for the same time period is 0.099mg/L. The Operator explained this by saying he takes the TRC samples from the chlorine contact chamber and not after de-chlorination.

3) The daily logs for TRC never vary, they are always reported as 0.01 mg/L. The DMRs reported value does not change either, it is always reported as 0.099mg/L. This is inconsistent with the TRC being taken from the chlorine contact chamber, before de-chlorination.

4) Sample and analysis records do not identify both the person who collected the samples and the person who analyzed the samples for TRC and pH.

5) Flow Data are all estimates. The 30 day average loading values on the DMRs are based on the estimated flow.

6) The EPA is encouraging permittees to transition from submitting DMRs as paper copies to the NetDMR system. Barbara Perry is the person who fills out the DMRs. According to Ms. Perry, the NetDMR system is too cumbersome and requires training by the school's Superintendent. This is considered too burdensome to the permittee, so they prefer to continue submitting paper records.

Information on the NetDMR training information can be found at:
http://epa.gov/netdmr/about/training.html

Additionally, the State conducts classes on a periodic basis, through the Operator Certification Schools. Facility personnel are encouraged to attend these training sessions.

7) E. coli bacteria are being reported as an arithmetic mean. The permit requires that they be reported as a geometric mean. E. coli bacteria replaced Fecal Coliform in this permit.

Operation and Maintenance

Overall Rating For Operation and Maintenance (Unsatisfactory)

Permit Requirements For Operation and Maintenance (O&M)

The permit requires in Part III.B.3. PROPER OPERATIONS AND MAINTENANCE:

a. The permittee shall at all times properly operate and maintain all facilities and systems of the treatment and control (and related appurtenances) which are installed or used by permittee as efficiently as possible and in a manner which will minimize upsets and discharges of excessive pollutants and will achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

b. The permittee shall provide an adequate operation staff which is duly qualified to carry out the operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

Findings for Operation and Maintenance

1) The aeration basin looked somewhat grey instead of a rich brown color that indicates health bacterial growth necessary for biological treatment, indicating older solids. This is a very small package plant and there may not be adequate "food" available to maintain the desired microbial growth. Solids were last wasted during the summer of 2012 from the aeration basin and the clarifier portion of the plant via vactor truck. This was verified by the invoice from the hauler.

2) The chlorine contact chamber dispenser has 4 tablet tubes. A new tablet was added the day of the inspection. Two of the four tubes had dissolving tablets and two were empty. The operator stated that as a standard practice, he added tablets only after there has been an E. coli effluent exceedences. He stated that he would be more attentive to maintaining the chlorine levels in the future.

3) There were no Standard Operating Procedures.

4) The Emergency Plan is to shut down the School in the event of a WWTP failure.

5) There is one plant operator, Mr. Louis Gachupin, who is certified as a Level 1 Wastewater Operator through the State of New Mexico Operators Certification Program. Mr. Gachupin is the person who is responsible for all maintenance and sampling of the WWTP. There is no back up person who is knowledgeable of operations in the event Mr. Gachupin is not available. The Facility Operators Program offers guidance on the number of certified operators needed at WWTP. That information can be found at the following website: http://www.nmenv.state.nm.us/swqb/UOCP/Compliance/Survey/#Resources

6) There were a few spare parts on site but most parts would need to be ordered if necessary.

7) There is an inadequate alarm system in the event of WWTP overflows or power failures.

Self-Monitoring

Overall Rating For Self Monitoring (Marginal)

Permit Requirements For Self Monitoring

The permit requires in Part III. C.

2. REPRESENTATIVE SAMPLING

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

Findings For Self Monitoring

1) The operator is not taking effluent samples from the correct location. Samples are being taken from the chlorine contact chamber, before de-chlorination.

Flow Measurement

Overall Rating For Flow Measurement (Unsatisfactory)

Permit Requirements For Flow Measurements:

The permit requires in Part III C. 6. FLOW MEASUREMENTS:

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed calibrated, and maintained to **insure** *that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected, shall be capable of measuring flow with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Findings For Flow Measurement

Flow readings are estimated.

Due to the design of the weir box, the lack of a fixed measuring device, the uneven flow, and no records of flow conversion factors, this device does not produce a reliable flow reading.

Laboratory

Overall Rating For Laboratory (Unsatisfactory)

Permit Requirements For Laboratory

The permit requires in Part III. C. 5. MONITORING PROCEDURES

a. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit or approved by the Regional Administrator.

b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

Findings For Laboratory

The laboratory analysis for E. coli, TSS, and BOD are conducted by the contract laboratories, State Laboratory Division of the Department of Health (SLD) and Hall Environmental. Two parameters are conducted by the operator in the field. These parameters are pH and Total Residual Chlorine (TRC).

1) There was no record that the TRC and pH analysis was conducted within the 15 minute holding time.

2) The buffer for the TRC analysis was expired.

3) There are no records of pH meter calibrations.

4) The pH meter probe was not stored correctly. The probe was capped and dry. The probe should always be capped with a storage solution or in a pH buffer 4.

5) pH calibration standard buffers were not provided to the inspector for review, so it could not be verified that the buffers were within the expiration date.

6) According to Mr. Gachupin, the pH meter is calibrated every time it is used.

Effluent and Receiving Waters

Overall Rating For Effluent and Receiving Water (Marginal)

Permit Requirements For Effluent and Receiving Waters

The permit requires in SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

E. coli Bacteria 30 day average = 126cfu
E. coli Bacteria Daily Max = 410 cfu

Findings for Effluent and Receiving Water

Effluent exceedences for E. coli bacteria as reported on the DMRs:
September 2012. Daily Maximum = 2419.6 cfu
February 2012. Daily Maximum = 488.4 cfu
February 2012. Monthly Average = 406.95 cfu
September 2011. Monthly Average = 228.2 cfu
August 2011. Daily Maximum = 648.8 cfu
August 2011. Monthly average = 648.8 cfu
July 2011. Daily Average = 920.8 cfu
July 2011. Monthly Average = 920.8 cfu

Sludge Handling and Disposal

Overall Rating For Sludge Handling and Disposal (Satisfactory)

NMED/SWQB Official Photograph Log Photo # 1		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:00 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Package plant from the head works to the Chlorine Contact Chamber. Contained within the fenced area.		

NMED/SWQB Official Photograph Log Photo # 2		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:01p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine contact chamber and effluent weir.		

NMED/SWQB Official Photograph Log Photo #3		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:02p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine Tablet Dispenser – In the Chlorine Contact Chamber.		

NMED/SWQB Official Photograph Log Photo #4		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:04 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine tablet dispenser 1 of 4 – a new tablet was added the same day.		

NMED/SWQB Official Photograph Log Photo # 5		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:04 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine tablet dispenser 2 of 4 with dissolving tablets.		

NMED/SWQB Official Photograph Log Photo # 6		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:05 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine Tablet Dispenser 3 of 4 - no tablets.		

NMED/SWQB Official Photograph Log Photo # 7		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:05 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Chlorine tablet dispenser 4 of 4 no tablets.		

NMED/SWQB Official Photograph Log Photo # 8		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:12 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Influent bar screen scrapings. The large solids are dried and disposed of at the Sandoval County Landfill.		

NMED/SWQB Official Photograph Log Photo # 9		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:22 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Subject: Flow Measurement Yardstick is placed in the center of the notch of the effluent weir box.		

NMED/SWQB Official Photograph Log Photo # 10		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:22 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Flow Measurement Yardstick –According to the Operator, ½ inch = 0.01 mgd. - The operator stated that he does not need to use the yardstick regularly. He can estimate the flow most days.		

NMED/SWQB Official Photograph Log Photo # 11		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:16 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Effluent Pipe to the Jemez River.		

NMED/SWQB Official Photograph Log Photo # 12		
Photographer: B. Cooney	Date: 1/9/2013	Time: 12:15 p.m.
City/County: Canon / Sandoval		State: New Mexico
Location: Jemez Valley Schools Wastewater Treatment Plant		
Subject: Jemez River at the Effluent Outfall of the WWTP.