



**NEW MEXICO
ENVIRONMENT DEPARTMENT**



Surface Water Quality Bureau

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CERTIFIED MAIL – RETURN RECEIPT REQUESTED

December 20, 2012

Mr. Allen Hoffman, President
Oshara Village Water Reclamation Facility
Post Office Box 24191
Santa Fe, NM 87502

RE: Minor Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; Oshara Village Water Reclamation Facility; NM0030813; November 29, 2012

Dear Mr. Hoffman:

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.

Please submit a written report regarding this inspection to:

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

Program Manager
New Mexico Environment Dept.
Surface Water Quality Bureau
Point Source Regulation Section
Post Office Box 26110
Santa Fe, NM 87502

I wish to thank you for the cooperation that was extended by Mr. Leonard Quintana to myself and Mr. Valenta while at the Oshara Village Water Reclamation Facility. If you have any questions concerning this inspection report, please feel free to contact me at (505) 827-1041 or sandra.gabaldon@state.nm.us

Sincerely,

/s/ Sandra Gabaldon

Sandra Gabaldón
Surface Water Quality Bureau

Cc: Rashida Bowlin, (6EN-AS) via e-mail
Carol Peters-Wagnon (6EN-WM) via e-mail
Larry Giglio (6WQ-PP) via e-mail
Diana McDonald (6EN-WM) via e-mail
Darlene Whitten-Hill (6EN-WC) via e-mail
Hannah Branning, USEPA (6EN-WC) via e-mail
NMED, District II

SECTION A - PERMIT VERIFICATION

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

DETAILS:

- 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:

- 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. S M U NA (FURTHER EXPLANATION ATTACHED YES)

DETAILS:

- 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. Y N NA
- STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED. Y N NA
- PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. Y N NA

OSHARA VILLAGE WATER RECLAMATION FACILITY

PERMIT NO. NM0030813

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 X U NA (FURTHER EXPLANATION ATTACHED NO)
 DETAILS:
PLEASE SEE SECTION B FURTHER EXPLANATIONS

- 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 NO)
 DETAILS:

- 1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE: Palmer Bowles
- 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. 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 X 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

SECTION F - LABORATORY (CONT'D)

- 2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED Y N X NA
- 3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. O S O M X U NA
- 4. QUALITY CONTROL PROCEDURES ADEQUATE. O S M X U NA
- 5. DUPLICATE SAMPLES ARE ANALYZED 0 % OF THE TIME. O Y X N NA
- 6. SPIKED SAMPLES ARE ANALYZED. % OF THE TIME. Y N X NA
- 7. COMMERCIAL LABORATORY USED. X Y N NA

LAB NAME SUMMIT ENVIRONMENTAL TECHNOLOGIES BIO-AQUATIC
 LAB ADDRESS 2709 PAN AMERICAN FREEWAY, NE; ALBUQUERQUE, NM 87107 2501 MAYES RD #100, CARROLLTON, TX 75006
 PARAMETERS PERFORMED E COLI, BOD, TSS BIOMONITORING

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

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001							

RECEIVING WATER OBSERVATIONS No discharge at time of inspection. Facility is a Sequencing Batch Reactor.

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. X S M U NA (FURTHER EXPLANATION ATTACHED NO.).
 DETAILS:

- 1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. X S M U NA
- 2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. X S M U NA
- 3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: N/A (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

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

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

Oshara Village Water Reclamation Facility
NPDES Permit No. NM0030813
Compliance Evaluation Inspection
Inspection Date: November 29, 2012

Further Explanation

INTRODUCTION:

On November 29, 2012, Sandra Gabaldón and Daniel Valenta of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Oshara Village Water Reclamation Facility. The facility has a design flow capacity of 0.03 MGD (million gallons per day) and is classified as a minor municipal 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 NM0030813. This permit regulates the discharge to the Arroyo Hondo in Segment 20.6.4.97 of the Rio Grande Basin. Designated uses include livestock watering, wildlife habitat, limited aquatic life and secondary contact.

The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (SEPA), Region VI, under the NPDES permit program, in accordance with the federal Clean Water Act. USEPA uses these inspections to determine compliance with the NPDES permit program. This inspection report is based on information provided by the permittee's representative, observations made by the NMED inspector, and records and reports kept by the permittee and/or NMED.

Inspectors arrived at the facility at 0900 hours on November 29, 2012, and met with Mr. Leonard Quintana, contract operator. An exit conference to discuss preliminary findings was held at the facility with Mr. Quintana to provide Mr. Quintana an opportunity to ask questions concerning the inspection. The inspectors left the facility at 1027 hours.

TREATMENT SCHEME:

The facility is a Sequencing Batch Reactor (SBR). The system consists of one lift station that brings raw influent from approximately 50 houses in the Oshara Village to the Water Reclamation Facility.

Flow then travels to an approximately 12" wide barscreen with 1" openings to catch large rags and debris.

From the headworks, influent travels into the conditioning sludge storage tank. Influent then travels into an anoxic equalization tank. Two pumps then transfer the influent to the Sequencing Batch Reactor which has an aspirating aerator that provides oxygen to the system. Each cycle of treatment consists of fill/react, interact/react, settle and

decant. The phases of treatment are controlled by a PLC (Programmable Logic Controller), which the operator can adjust manually to provide optimum treatment phases.

Disinfection of the wastewater is achieved through a chlorine contact tank. Sodium hypochloride is dosed into the decant pipe during the decant phase. The effluent, at this time is not de-chlorinated. There is, however, a tank labeled for sodium bisulfate which the operator states is not being used.

The effluent is metered by an ultrasonic flow meter. There is a primary Palmer Bowles Flume as well. The effluent enters the Arroyo Hondo through a 10" closed pipe with a rip rap area below the pipe to eliminate erosion and provide velocity dissipation.

SLUDGE:

The sludge is removed from the sludge holding tank with a vacuum truck and taken to the Santa Fe Wastewater Treatment Plant for final disposal.

FURTHER EXPLANATION

Note: The sections are arranged according to the format of the enclosed EPA Inspection Checklist (Form 3560-3), rather than being ranked in order of importance.

Section B – Recordkeeping and Reporting Evaluation – Overall Rating of “Unsatisfactory”.

Permit Requirements for Recordkeeping and Reporting:

EPA – NPDES Reporting Requirements Handbook, Revised August 25, 2004, it states: In Section H, Definitions and Calculations for Discharge Monitoring Reports, Reporting Loadings:

*“Some parameters in the permit are limited in terms of pounds per day (lbs/day). Although all of these parameters are measured initially in milligrams per liter (mg/L), conversion to lbs/day can be achieved using the following formula (Flow on the day of sampling (MGD) X concentration (mg/L) X 8.34 (lbs/gal) = Loading (lbs/day). **Always be sure and use the flow measurement determined on the day when sampling was done.**”*

Part I – Requirements for NPDES permitting, A. Limitations and Monitoring Requirements state:

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		Standard Units							
POLLUTANT	STORET CODE	MINIMUM			MAXIMUM			MEASUREMENT FREQUENCY	SAMPLE TYPE
PH	00400	6.6			9.0			5 /Week	Grab
EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		lbs/day, unless noted		mg/l, unless noted					
POLLUTANT	STORET CODE	30-DAY AVG	7-DAY AVG	30-DAY AVG	7-DAY AVG	Percent Removal (*1)	DAILY MAX	MEASURE FREQUENCY	SAMPLE TYPE
Flow	50050	Report GPD	Report GPD	N/A	N/A	N/A	N/A	Continuous when discharging	Flow Meter
Biochemical Oxygen Demand, 5-day	00310	7.51	11.27	30	45	85% min	N/A	Once/Month (*2)	Grab

Total Suspended Solids	00530	7.51	11.27	30	45	85% min	N/A	Once/Month (*2)	Grab
Total Residual Chlorine	50060	N/A	N/A	N/A	N/A	N/A	11 µg/l (*3)	5 /Week	Grab
<i>E. coli</i> Bacteria	51040	N/A	N/A	206 (*4)	N/A	N/A	940 (*4)	Once/Month (*2)	Grab
Whole Effluent Toxicity Testing									
Daphnia pulex			30-Day Avg			48-Hr Minimum	Measurement Frequency	Sample Type	
			Report			Report	Once/Term (*6)	24-Hr. Composite	

*6 Once per permit term. The test shall take place between November 1 and April 30 during the first year of the permit term.

Part II.A – Other Conditions of the permit states:

Under the provisions of Part III.D.7.b.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to EPA Region 6, Compliance and Assurance Division, Water Enforcement Branch (6EN-W), Dallas, Texas, and concurrently with NMED within 24 hours from the time the RME becomes aware of the violation followed by a written report in five days.

*Total Residual Chlorine
E. Coli Bacteria*

Findings for Recordkeeping and Reporting:

The permittee uses the monthly average when calculating loading rather than the flow the day the sample was taken. This is a **repeat finding**. The permittee was again told that this is incorrect and the loading calculation should be calculated using the flow data from the day the sample was taken.

The permittee did a grab sample for whole effluent toxicity testing on July 17, 2012. According to footnote *6, monitoring shall take place between November 1 and April 30, 2012. A 24-hour composite sample is required by the permit. The permittee explained that it was nearly impossible to run a 24-hour composite sample because of the minimal flow and the batch discharge.

The permittee is required to report the flow when they are discharging. The permittee did not record any flow during the weekend. He records the flow only five days a week.

The permittee provided bench sheets for September 2012 and May 2012. The benchsheet for September 2012 has the following parameters listed: Influent pH; Influent meter; Influent total; Effluent pH; Effluent Chlorine; Effluent meter; Effluent

total; Waste Minutes; Batch total; 5/30 minute settlometer; DO and pH slope. Of these parameters, the only parameters that were filled out were effluent pH and Batch total. There was no indication the permittee took samples for total residual chlorine as required by the permit. The permittee did not record the times and locations of sampling; name of individual performing the sample; analytical methods or techniques being used; results of calibrations; or the name of person performing analysis.

The benchsheet provided for May 2012 has the same parameters listed as the September 2012 benchsheet. However, on this benchsheet effluent chlorine is filled out with results of 0.00 every day that it was taken. There is no indication of the units (mg/L or ug/L) associated with the chlorine reading. Because there was no indication of the units being used, the inspector reviewed all benchsheets for chlorine from January 2012 to present (September 2012). Each benchsheet showed no units and every reading of chlorine was 0.00. In January 2012, however, chlorine was only sampled four times for the month; February 2012 sampled 21 times; March 2012 sampled 22 times; No benchsheet for April; June 2012 sampled 20 times; July 2012 sampled 20 times; No sample results provided for August 2012 on benchsheet; No sample results provided for September 2012. It is highly unlikely that each chlorine sample would be 0.00 every single time the sample was checked. The operator did not provide the chlorine meter or the pH meter for review during this inspection. The operator was notified by telephone the morning of the November 29, 2012, of the impending NPDES inspection taking place at 9:00 AM. The operator arrived without any of his equipment (pH meter, chlorine meter, buffers, reagents). The inspector could not verify that the equipment was in working order or that the pH buffers or the chlorine reagent was not expired. The operator sends all other parameters (BOD, TSS, E.coli) to a contract laboratory for analysis.

Again, these benchsheets are missing times and locations of sampling; name of individual performing the sample; analytical methods or techniques being used; results of calibrations; or the name of person performing analysis.

The permittee did not report within 24-hours the TNTC (Too numerous to count) results for E. coli taken in May 2012 or the E. coli exceedance in June 2012. No written report was submitted to EPA, Region 6, or New Mexico Environment Department as required by Part II of the permit within the required five days.

There are no calibration or maintenance records provided by the permittee. The inspector was unable to verify calibration of pH or chlorine meters.

The permit requires all records contain the date, exact place, and time of sampling; the individual who performed the sampling; the date and time analyses were performed; the individual who performed the analysis; the analytical techniques or methods being used; and the results of analyses. These requirements are necessary to verify that approved methods and holding times are within the requirements of 40 CFR Part 136.

Section C – Operations and Maintenance – Overall Rating of “Marginal”

Part III.B.3 of the permit states:

- a. *The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the 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 back up 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 operating staff which is duly qualified to carry out operation, maintenance and testing functions required to insure compliance with the conditions of this permit.*

Findings for Operation and Maintenance:

Mr. Quintana, the lead operator at this facility, stated that the barscreen is cleaned every day that he is onsite. However, during this inspection, it was apparent that the bar screen had not been cleaned. There was excessive debris on the barscreen which did not allow for flow to pass through, rather it was likely going over through the bypass.

There are no measures or written procedures established for emergency treatment controls at this facility. This is a **repeat finding**.

Section E – Flow Measurement – Overall Rating of “Marginal”

The Permit requires in Part III, Section C.3:

The permittee shall retain records of all monitoring information, including calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application.

The Permit requires in Part III, Section C.5.b:

- a. *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.*

The Permit requires in Part III, Section C.6:

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 discharge. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of the type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.

Findings for Flow Measurement:

The permittee could not produce any records that showed that their flow meter has been calibrated by a qualified person in the past year.

The permittee does not do calibration checks to assure the flows measured are within 10% of the actual effluent flow.

Section F – Laboratory – Overall Rating of “Unsatisfactory”

The Permit requires in Part III, Section C.5:

- 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.*
- c. *An adequate analytical quality control program, including the analyses of sufficient standards, spikes, and duplicate samples to insure the accuracy of all required analytical results shall be maintained by the permittee or designated commercial laboratory.*

Findings for Laboratory:

There are no calibration or maintenance records provided by the permittee. The inspector was unable to verify calibration of pH or chlorine meters.

The permittee provided benchsheets from their contract laboratory, Summit Environmental Technologies, Inc. The benchsheet for June and September 2012 does not have analysis for E. coli. The permittee, however, did report on their DMR for September that no sample was taken. No further explanation was provided. The permittee did one duplicate sample for BOD and TSS effluent, but no duplicate has been done (January - September 2012) at this time for E. coli. At least 10% duplicate samples should be performed to verify accuracy as well as precision of their contract laboratory.

The permittee exceeded E. coli in January and in May. No oral notification was given to either EPA or NMED. No written report was provided to either EPA or NMED within five days as required.

DMR Calculation Check

Review of benchsheets from May and September 2012, in which permittee was discharging, are reviewed below.

Flow is reported in Gallons per Day (GPD). However, the GPD must be converted to Million Gallons per Day (MGD) to calculate the loading. (GPD / 1,000,000 = MGD)

MAY 2012

BOD EFFLUENT LOADING CALCULATION: (MGD X CONCENTRATION (mg/L) X 8.34 = lbs/d)

Sample Date:	Daily Flow	BOD (mg/l)	Calculated Daily Load
05/02/2012	660 GPD = .00066 MGD	ND (MQL= 5.0)	.00066 X 5.0 X 8.34 = .027 lb/d
Calculated Monthly Loading Average:	.027 lbs/d		
Reported on DMR			
7-Day Average:	0.32 lbs/d		
30-Day Average:	0.31 lbs/d		

TSS EFFLUENT LOADING CALCULATION:

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
05/02/2012	660 GPD = .00066MGD	3.0	.00066 X 3.0 X 8.34 = .016 lbs/d
Calculated Monthly Loading Average:	.016 lbs/d		
Reported on DMR			
7-Day Average:	0.19 lbs/d		
30-Day Average:	0.18 lbs/d		

BOD INFLUENT/EFFLUENT PERCENT REMOVAL CALCULATION:

(average monthly influent concentration – average monthly effluent concentration) /
average monthly influent concentration)

Sample Date:	Daily Flow (MGD)	BOD influent (mg/l)	BOD effluent (mg/l)
05/02/2012	.00066 MGD	513.0	5.0
PERCENT REMOVAL:	513.0 – 5.0 = 508 / 513 = 99% REMOVAL		
Reported on DMR	99%		

TSS INFLUENT CALCULATION:

Sample Date:	Daily Flow (MGD)	TSS influent(mg/l)	TSS effluent (mg/l)
05/02/2012	.00066	294.0	3.0
PERCENT REMOVAL:	294.0 – 3.0 = 291.0 / 294.0 = 98% REMOVAL		
Reported on DMR	98%		

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Daniel Valenta	Date: 11-29-2012	Time: 0922 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Oshara Village Water Reclamation Facility		
Subject: Headworks Barscreen – Debris seen along entire barscreen.		

