SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

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

DAVE MARTIN
Secretary

BUTCH TONGATE
Deputy Secretary

JAMES H. DAVIS, Ph.D.
Director
Resource Protection Division

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

May 22, 2012

Mr. Rexford E. Ross
Univest, Inc.
4900 North Scottsdale Road
Scottsdale, AZ 85251

RE: Minor Non-Municipal; SIC 4952; NPDES Compliance Evaluation Inspection; Ranchland Utilities; NM0030368; May 8, 2012

Dear Mr. Ross:

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.

Please submit a written report documenting the actions you have taken or will take to correct the problems identified in this inspection to both the USEPA and NMED at the following addresses:

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. Quintana to myself and Mr. Valenta while at the Ranchland Utilities Wastewater Treatment Plant. 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 Gabaldón
Sandra Gabaldón
Surface Water Quality Bureau
Point Source Regulation

Cc: Marcia Gail Adams (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
Samuel Tates, USEPA (6EN-AS) via e-mail
Hannah Branning, USEPA (6EN-WC) via e-mail
NMED, District II

EPA

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 3 0 3 6 8 11	12 1 2 0 5 0 8 17	18 C	19 S 20	2

Remarks: P R I V A T E D O M E S T I C

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
67 69	70 2	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)*	Entry Time /Date	Permit Effective Date
RANCHLAND UTILITIES Take I-25 South from Santa Fe to Madrid Exit. Turn Left on Rancho Viejo Blvd. Go Approximately 1.5 miles, turn right on Avenida del Sur and go to Avenida Nu Po. Turn right and proceed to WWTP. **SANTA FE COUNTY**	1010 Hours / May 08, 2010	July 23, 2004
	Exit Time/Date 1235 Hours / May 08, 2010	Permit Expiration Date June 30, 2012

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data
Leonard Quintana, Level IV Operator (505) 470-3697	SIC 4952
Name, Address of Responsible Official/Title/Phone and Fax Number Mr. Rexford E. Ross (602) 421-6700 Univest, Inc. 4900 N. Scottsdale Road Scottsdale, AZ 85251	35°35'22.56" N -106°01'28.65" W

Contacted: Yes [ ] No [*]

Section C: Areas Evaluated During Inspection

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

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

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

Please see further explanations for details

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
Sandra Gabaldón */s/ Sandra Gabaldon*	NMED/SWQB/ (505) 827-1041/ (505) 827-0160	May 22, 2012
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
Richard E. Powell */s/ Richard E. Powell*	NMED/SWQB/ (505) 827-2798 / (505) 827-0160	May 22, 2012

RANCHLAND UTILITIES	PERMIT NO. NM30030368

SECTION A - PERMIT VERIFICATION

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

RANCHLAND UTILITIES	PERMIT NO. NM30030368

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. No calibration of thermometer	☐ 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:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. TYPE OF DEVICE 6-inch Parshall flume	☒ 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.	☐ 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

RANCHLAND UTILITIES | PERMIT NO. NM30030368

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. 0 % 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 Summit Environmental Technologies, Inc Bio-Aquatic

LAB ADDRESS 3310 Win Street; Cuyahoga Falls, OH 44223 2501 Mayes Road; Suite 100; Carrollton, TX 75006

PARAMETERS PERFORMED BOD, TSS, E. coli Biomonitoring

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
001	None	None	None	None	None	Clear	

RECEIVING WATER OBSERVATIONS Please see further explanations section of the report for details on Effluent/Receiving Waters

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: Composting (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES *(FURTHER EXPLANATION ATTACHED ___).*

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
Ranchland Utilities Water Reclamation Facility
NPDES Permit No. NM0030368
May 8, 2012

Introduction

A Compliance Evaluation Inspection (CEI) was conducted at the Ranchland Utilities Water Reclamation Facility, located in Santa Fe, New Mexico on May 8, 2012 by Ms. Sandra Gabaldón, accompanied by Mr. Daniel Valenta, of the State of New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB). This facility is classified as a minor private domestic discharger under the federal Clean Water Act (CWA), Section 402. This facility is regulated under the National Pollutant Discharge Elimination System (NPDES) permit program, and is assigned NPDES permit number NM0030368. The facility design flow is 0.375 million gallons per day (MGD).

The Ranchland Utilities Water Reclamation facility discharges into the Canada del Rancho, thence to Arroyo Hondo, thence to Cienega Creek, thence to the Santa Fe River in Segment 20.6.4.113 NMAC of the Rio Grande Basin (*State of New Mexico Standards for Interstate and Intrastate Surface Waters).* Designated uses of 20.6.4.113 NMAC are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.

The inspectors arrived at the Ranchland Utilities Water Reclamation Facility at 1010 hours and conducted an entrance interview with Mr. Leonard Quintana, Level IV Operator. The inspector made introductions, presented her credentials, and discussed the purpose of the inspection with Mr. Quintana. An exit interview to discuss preliminary findings of the inspection was conducted with Mr. Quintana on site.

The NMED performs a specific number of CEI's annually for the United States Environmental Protection Agency (USEPA). The purpose of this inspection is to provide the USEPA with information to evaluate the permittee's compliance with their NPDES permit. The enclosed inspection report is based on verbal information supplied by the permittee's representatives, observations made by the NMED inspector, and a review of records maintained by the permittee, commercial laboratories, and/or NMED. Findings of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

Treatment Scheme

There are approximately 1200 homes currently served by the wastewater treatment facility. Three lift stations bring the influent into the headworks which consist of an auger for grit removal. The grit removed is taken to the Rio Rancho landfill for final disposal. From the headworks, flow continues to the Biolac basin which is a synthetically lined basin with wave-oxidation fine bubble diffusers. On this date, may diffusers were malfunctioning. The Biolac system uses moving aeration chains which improve the mixing efficiency of the basin. From the Biolac basin, flow enters one of two circular clarifiers. At the time of the inspection, one clarifier was on-line. Influent then travels to the

discfilter for polishing. There are two discfilters, one used, and the other on stand-by. Flow then goes through the Ultraviolet system for disinfection. Then, it is discharged through a Parshall flume to a holding pond where it is later used for irrigation on land application sites located within the Rancho Viejo development area.

Sludge:

The aerobic sludge digestor has a capacity of 85,000 gallons. The digester receives WAS from the clarifier and is digested and gravity thickened. Supernatant from the sludge digestor is returned to the influent wet well.

A private contractor hauls digested sludge to a septage/sludge receiving station operated by the City of Santa Fe Wastewater Treatment Facility. The city completes additional treatment of the sludge prior to final surface disposal/composting.

Compliance Evaluation Inspection
Ranchland Utilities Water Reclamation Facility
NPDES Permit No. NM0030368
May 8, 2012

Further Explanations

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 A – Permit – Overall Rating "Unsatisfactory"

Permit requires in Part III, Section.A.4 Duty to Reapply:

> *"If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR 122.6 and any subsequent amendments."*

Findings for Section A – Permit:

The permittee has failed to submit an application 180 days prior to expiration of their current permit. Their current permit expires on June 30, 2012. The permittee stated that a consultant has been hired and he believes the permit will be submitted to the Environmental Protection Agency (EPA) by June 1, 2012. The permit application should have been submitted no later than January 1, 2012.

Section C – Operations and Maintenance – Overall Rating of "Unsatisfactory"

Permit requires in Part III, Section B.3 Proper Operation and Maintenance:

> 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 permittee as efficiently as possible and in a manner which will minimize upsets or 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 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 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 Section C - Operation and Maintenance:

When the inspectors and the operator went to the discharge pipe at this facility, it was noted that the pipe was discharging and the area around the pipe had green vegetation. This may be an indication of prolonged discharge. The effluent was apparently supposed to be discharging only to the retention pond. However, it was also noted that the bank of the pond had been breached and effluent was entering the discharge channel from the pond as well. The operator stated that he would fix the embankment of the pond as soon as possible and was going to try and replace the valve which apparently was not shutting all the way to the discharge pipe. It is unclear how long this discharge has been occurring. No sampling has been occurring on the months that the operator has stated "no discharge" on their DMRs.

The biolac system has floating solids as well as noticeable grease. Some of the fine bubble diffusers were malfunctioning. The permittee purchased a boat to enable the operator to get into the biolac pond, however, there is no ramp to allow for the boat to enter the pond. Therefore, the operator has no way of accessing the pond to clean it out and maintain the diffusers.

The level IV operator is the only certified operator on site. The operator stated that he is currently training Marcus Ortiz, who has no certification. Mr. Ortiz plans on testing for his level I certification in the near future. However, there is an issue with only one operator. If this operator becomes ill or needs to take an extended leave of absence, this would negatively affect the operation of the facility.

The facility has a generator on site. However, this generator does not provide power to the entire facility if there is a power failure. The generator provides power to one lift station (there are two lift stations), the blowers and barscreen.

The permittee has two channels of ultraviolet lights for disinfection. The operator can switch weekly from each channel for disinfection. However, on this date, it was noted that the non-functioning ultraviolet channel had some flow going through it, which indicates that there is a faulty valve that is not closing completely. This effluent is leaving the facility without proper disinfection.

The operator stated that there are some spare parts. There is no inventory list of spare parts available.

The permittee has no operation and maintenance manual nor does the permittee have an emergency treatment procedure in place. These are necessary training documents for all employees of the facility.

Section D – Self-Monitoring – Overall Rating "Unsatisfactory"

Permit requires in Part III, C.5 Monitoring Procedures:

a. *Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified 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 measurement and shall maintain appropriate records of such activities.*

Findings for Self-Monitoring:

The permittee has failed to calibrate their thermometer on an annual basis against an NIST calibrated thermometer.

The permittee is required to sample for Daphnia Pulex every two years. These tests are required to be performed between November 1 and April 30. The permitee has failed to test for 2012, as required by the permit.

The permittee has a contracted laboratory, Summit Environmental Technologies, Inc., that performs TSS, BOD and E. coli for the permittee. However, the laboratory does not provide the actual time that these parameters are analyzed. It provides only the date. The actual time is crucial in verifying the holding times for each parameter, especially E. coli which has a holding time of six hours.

Section E – Flow Measurement – Overall rating of "Unsatisfactory"

The permit requires in Part III, Section 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 measures of the volume of the 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 flows with maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Findings for Flow Measurement:

The permittee is required to calibrate their totalizer at least annually by an outside representiatve to insure accurate flow measurement. Accurate flow measurement is required when doing mass loading calculations.

The totalizer is placed in an improper location; the totalizer is located in the wrong position relative to the primary device. It is placed relatively close to the discharge point in an area of turbulence.

Section F – Laboratory – Overall rating of "Marginal"

Permit requires in Part III, C.5 Monitoring Procedures:

> *a. An adequate analytical quality control program, including the analysis 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:

It appears that the permittee has failed to do 10% duplicate sampling as part of their quality control procedures. The purpose of laboratory control procedures is to ensure high-quality analyses by the use of control samples, control charts, reference materials, and instrument calibration. The permittee must initiate and maintain controls throughout the analysis of samples. Specifically, each testing batch must contain at least one blank, standard, duplicate, and spiked (as applicable) sample analysis. When a batch contains more than 10 samples, every tenth sample should be followed by a duplicate and a spike (as applicable).

Section G – Effluent/Receiving Waters Observations – Overall rating of "Marginal"

In Part III, Section C. Monitoring and Records, Discharge Monitoring Reports and other Reports:

> *Monitoring results must be reported on Discharge Monitoring Reports (DMR) Form EPA no. 3320-1 in accordance with the "General Instructions" provided on the form. The permittee shall submit the original DMR signed and certified as required by Part III.D.11 and all other reported required by Part III.D.*

The permittee has submitted DMRs with "No Discharge" checked on the box. However, as noted during this inspection, the permittee is discharging effluent to Canada Del Rancho rather than having all effluent enter the retaining pond for irrigation purposes. The permittee should replace the faulty valve as soon as possible. It is unclear how long the permittee has been discharging and checking the "no discharge" box on their DMRs. The permittee has not checked their discharge location in a number of months prior to this inspection.

DISCHARGE MONITORING REPORT CALCULATION CHECK

(DONE FOR MONTH OF NOVEMBER 2011, WHICH THEY NOTED DISCHARGE TO CANADA DEL RANCHO, THENCE TO ARROYO HONDO, THENCE TO CIENEGA CREEK, THENCE TO SANTA FE RIVER)

NOVEMBER 2011

E. Coli

Sample Dates:	11/09/11	11/16/11	11/22/11	11/30/11	Data reported on DMR
E. coli (#100ml)	63.1	ND (<1)	<1	160	
Daily Max	160				160
30-day Average: Log of colonies per 100 mL Add all logs and divide by number of samples. Geometric Mean is antilog.	Log (63.1) + log (1.0) + log (1.0) + log (160) = 2.71 1.80 + 0 + 0 + 2.20 = 4.00 / 4 = 1.00 Antilog 1.00 = 10*				56.3

***Please see note below**

BOD

Sample Date:	Daily Flow (MGD)	BOD (mg/l)	Calculated Daily Load
11/08/2011	0.1093	ND (<5.0)	(0.1093)(8.34)(<5.0) = < 4.55
11/15/2011	0.1235	ND (<5.0)	(0.1235)(8.34)(<5.0) = < 5.14
11/29/2011	0.1188	ND (<5.0)	(0.1188)(8.34)(<5.0) = < 4.95
Calculated Monthly Average (Loading):	< 4.55 + < 5.14 + 4.95 = < 14.64 / 3 = < 4.88 lbs/d*		
Calculated Monthly Average (Conc.):	< 5.0 + < 5.0 + < 5.0 = <15.0 / 3 = < 5.0 mg/L✓		
Reported on DMR	5.0 lbs/d 30-D Avg.; 5.1 lbs/d 7-D Avg. ✓ < 5.0 mg/L 30-D Avg.; < 5.0 mg/L 7-D Avg.✓		

✓Matches calculations made by inspector as well as what was reported on DMR.

***Does not match what was reported on DMR.**

TSS

Sample Date:	Daily Flow (MGD)	TSS (mg/l)	Calculated Daily Load
11/08/2011	0.1093	ND (<2.0)	(0.1093)(8.34)(<2.0) = <1.82
11/15/2011	0.1235	ND (<2.0)	(0.1235)(8.34)(<2.0) = <2.05
11/29/2011	0.1188	ND (<2.0)	(0.1188)(8.34)(<2.0) = <1.98
Calculated Monthly Average (Loading):	<1.82 + <2.05 + <1.98 = 5.85 / 3 = < 1.95 lbs/d*		
Calculated Monthly Average (Conc.)	<2.0 + < 2.0 + < 2.0 = < 6.0 / 3 = < 2.0 mg/L ✓		
Reported on DMR	2.0 lbs/d 30-D avg.; 2.1 lbs/d 7-D avg. * < 2.0 mg/L 30-D avg.; < 2.0 mg/L 7-D avg.✓		

✓Matches calculations made by inspector as well as what was reported on DMR.

***Does not match what was reported on DMR.**

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Daniel Valenta	Date: May 8, 2012	Time: N/A
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Overview of Ranchland Utilities Treatment Plant		

NMED/SWQB
Official Photograph Log
Photo # 2

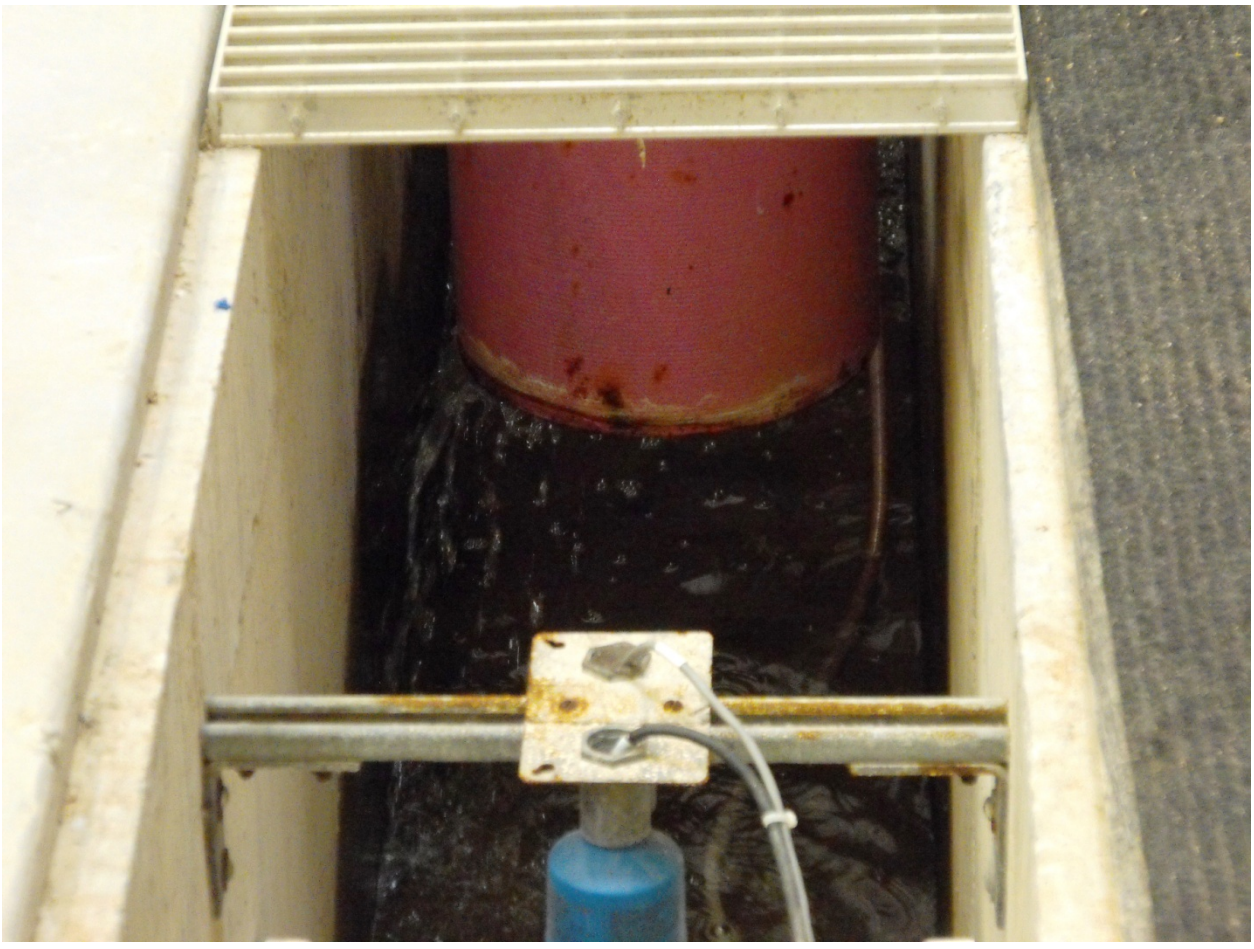
Photographer: Daniel Valenta	Date: May 8, 2012	Time: 1052 Hours
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Looking north – biolac basin.		

NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1058
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: West Clarifier		

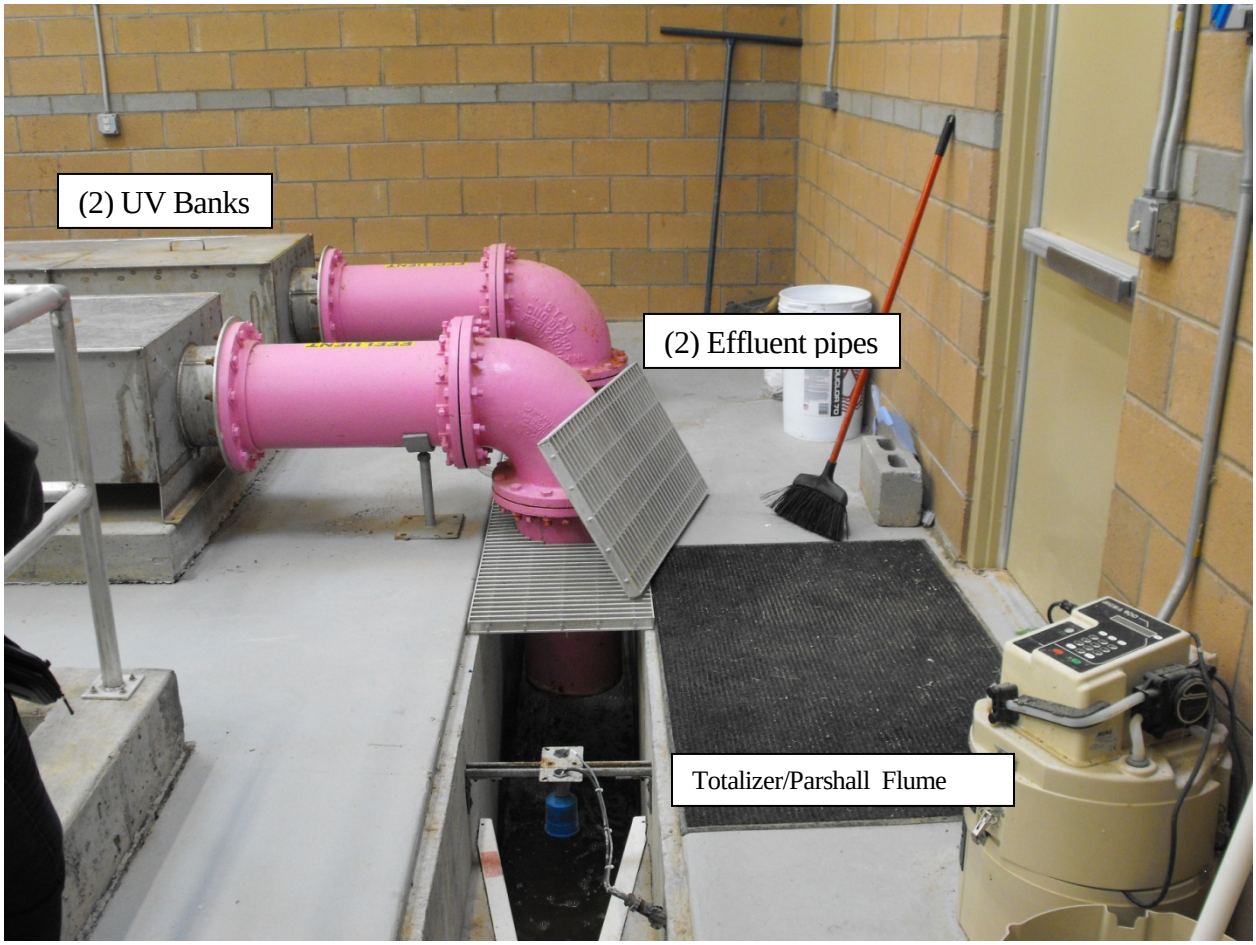
NMED/SWQB
Official Photograph Log
Photo # 4

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1107
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: South effluent pipes which were discharging, however, no UV disinfection was occurring from this side. There is an apparent faulty valve which does not close completely and allows undisinfected effluent to leave treatment plant.		



NMED/SWQB
Official Photograph Log
Photo # 5

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1107
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Overview of UV banks (North UV bank was on-line, south UV bank discharging as well – see previous picture)		



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1217
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Discharge location at Ranchland Utilities. Upon inspection, the permittee stated that all effluent was being discharged to the retention pond, however, there was effluent leaving the discharge point as well. No sampling has occurred.		

NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1218
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Discharge location at Ranchland Utilities. Upon inspection, the permittee stated that all effluent was being discharged to the retention pond, however, there was effluent leaving the discharge point as well. No sampling has occurred.		

NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: Daniel Valenta	Date: May 8, 2012	Hours: 1217
City/County: Santa Fe / Santa Fe		State: New Mexico
Location: Ranchland Utilities		
Subject: Retention pond