NEW MEXICO
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau

SUSANA MARTINEZ
Governor
JOHN SANCHEZ
Lieutenant Governor

1190 South St. Francis Drive, Room N2050
P.O. Box 26110, Santa Fe, NM 87502-6110
Phone (505) 827-0187 Fax (505) 827-0160
www.nmenv.state.nm.us

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

Certified Mail - Return Receipt Requested

April 6, 2011

Mr. Elouterio Trujillo, President
Mora Mutual Water & Sewer Works Association
P.O. Box 304
Mora, New Mexico 87732

Re: Minor Municipal, SIC 4952, NPDES Compliance Evaluation Inspection, Mora Mutual Water & Sewer Works Association Treatment Plant, NPDES Permit No. NM0024996, March 30, 2011

Dear Mr. Trujillo,

Enclosed, please find a copy of the report and check list 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.

Introduction, treatment scheme, and problems noted during this inspection are discussed in the Further Explanations section of the inspection report. The main problems were found in the area of Records/Reports, Operations/Maintenance, Self-Monitoring, and Flow Measurements. You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Diana McDonald
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
Suite 1200
1445 Ross Avenue
Dallas, Texas 75202-2733

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

If you have any questions about this inspection report, please contact me at (505) 827-1041 or sandra.gabaldon@state.nm.us

Sincerely,
/s/ Sandra Gabaldón

Sandra Gabaldón
Surface Water Quality Bureau

Cc: Marcia Gail Adams, EPA, Enforcement Section (6EN-AS) by e-mail
Stacey Bennett-Dwyer, EPA (6EN-AS) by e-mail
Carol Peters-Wagnon, EPA (6EN-WM) by e-mail
Diana McDonald, EPA (6EN-WM) by e-mail
Samual Tates, EPA, (6W-AS) by e-mail
Robert Italiano, Manager, NMED District II Manager (Santa Fe) by e-mail

EPA

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

NPDES Compliance Inspection Report

Section A: National Data System Coding

1	Transaction Code	2	NPDES	11	yr/mo/day	17	Inspec. Type	18	Inspector	19	Fac Type	20
	N	5	NM0024996	12	110330		C		S		1	

Remarks: MINOR WWTP

Inspection Work Days	67	69	Facility Evaluation Rating	70	BI	71	72	QA	73	74	75	Reserved	80
	1			1	N			N					

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*
At junction of 38/434 in Mora travel east on 518 for approximately 1 mile. Lagoons just east of E. Alto Rd, north side of road.

Entry Time /Date
0932 Hours / March 30, 2011

Permit Effective Date
November 1, 2008

Exit Time/Date
1123 Hours / March 30, 2011

Permit Expiration Date
October 31, 2013

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)
Clarence Aragon , Operations Manager 575-387 2767 / 575-447-3701 Cell

Name, Address of Responsible Official/Title/Phone and Fax Number
Mr. ElouterioTrujillo , President
Mora Mutual Domestic Water and Sewer Association
P.O. Box 304, Mora, NM 87732
office 575-387-2767 / fax 505-884-1032

Contacted
Yes [ ] No [*]

Other Facility Data

LAT 35 58 1.75 N
LONG –105 18 8.10 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
U	Records/Reports	M	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
U	Facility Site Review	U	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	M	Laboratory	N	Storm Water		Other:

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

1. SEE REPORT AND FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
/s/ Sandra Gabaldón SANDRA GABALDON	NMED/SWQB 505-827-1041 / 505-827-0160	APRIL 6, 2011
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
/s/ Richard E. Powell RICHARD E. POWELL	NMED/SWQB 505-827-0418	APRIL 6, 2011

MORA MUTUAL DOMESTIC WATER AND SEWER ASSOCIATION	PERMIT NO. NM0024996

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 ☒N
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

MORA MUTUAL DOMESTIC WATER AND SEWER ASSOCIATION	PERMIT NO. NM0024996

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:

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

MORA MUTUAL DOMESTIC WATER AND SEWER ASSOCIATION | PERMIT NO. NM0024996

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 ____	**LAS VAGAS WASTE WATER TREATMENT LAB**	**HALL ENVIRONMENTAL**
LAB ADDRESS__	**903 University Ave, Las Vegas, New Mexico 87701**	**4901 Hawkins, NE; Suite D; Albuquerque, NM 87109**
PARAMETERS PERFORMED	**TSS, BOD, Fecal, and E-Coli**	**Total Nitrogen, Total Phosphorus**

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**	**NO**	**NO**	**NO**	**NO**	**CLEAR**	

RECEIVING WATER OBSERVATIONS: **OUTFALL 001 DISCHARGES TO THE MORA RIVER**

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
Mora Mutual Water & Sewer Works Association
NPDES Permit No. NM0024996
March 30, 2011

Introduction

A Compliance Evaluation Inspection (CEI) was conducted at the Village of Mora Wastewater Treatment Plant (WWTP) managed by the Mora Mutual Water and Sewer Works Association on March 30, 2011 by Sandra Gabaldón and Daniel Valenta of the NMED Surface Water Quality Bureau for the U. S. Environmental Protection Agency (USEPA). The NMED performs a certain number of CEIs for the U.S. Environmental Protection Agency (USEPA), 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 representatives, observations made by the NMED inspectors, and records and reports kept by the permittee and/or NMED. Finding of the inspection are detailed on the attached EPA form 3560-3 and in the narrative Further Explanations section of the report.

The Mora WWTP is classified as a minor municipal discharger; with a design flow of 0.05 Million Gallons a Day (MGD). The discharge from the WWTP enters the Mora River in Water Quality Segment 20.6.4.307 of 20.6.4 NMAC (*State of New Mexico Standards for Interstate and Intrastate Surface Water*). The designated uses for this segment of the river are: marginal coldwater aquatic life, warmwater aquatic life, secondary contact, irrigation, livestock watering, and wildlife habitat. This segment of the Mora River is 303(d) listed as not supporting marginal coldwater aquatic life. Probable cause of impairment is listed as nutrient/eutrophication biological indicators and dissolved oxygen. A Total Maximum Daily Load (TMDL) has been calculated and implemented for this segment of the Mora River. Thus, included in the NPDES permit for Mora WWTP are discharge limitations for Total Phosphorous and Total Nitrogen which will go into effect in 2012.

Inspection Details

The inspectors made introductions and Ms. Gabaldón presented her credentials. A discussion of the impending compliance inspection was held. Mr. Aragon accompanied the inspectors to the WWTP for site evaluation. After touring the WWTP, Ms. Gabaldón requested that Mr. Aragon perform his daily analysis of pH and Total Residual Chlorine (TRC). The inspection moved on to the Association's office to review records. An exit interview was held with Mr. Aragon at approximately 1115 hours on March 31, 2011.

Treatment Scheme

The collection system is a gravity flow system throughout town to the WWTP. The water table in the Mora River Valley is extremely high and much of the collection system is in the water table. This results in high levels of inflow and infiltration (I&I). According to Mr. Aragon, the actual water distributed by the drinking water plant to the Village of Mora is approximately 0.016 to 0.018 MGD. The flow measured entering the WWTP is consistently greater than 0.5MGD. The entrance works of the WWTP consist of a bar screen and a 3" Parshall flume with an attached staff gauge. Flow continues to one of two lagoon

ponds, which run in series. The flow continues to a serpentine chlorine contact chamber where disinfection, followed by de-chlorination takes place prior to discharge at outfall 001 into the Mora River.

Solids Management

Sludge has not been removed from the lagoons for disposal.

Compliance Evaluation Inspection
Mora Mutual Water & Sewer Works Association
NPDES Permit No. NM0024996
March 30, 2011

Further Explanations

Section B – Recordkeeping and Reporting Evaluation: Overall rating of "Unsatisfactory"

The permit requires in Part III – Record Contents:

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 measurement;*
c. *The date(s) and time(s) analyses were performed;*
d. *The individual(s) who performed the analyses;*
e. *The analytical techniques or methods used; and*
f. *The results of such analyses.*

The permit requires in Part III.C.6 – Monitoring Procedures:

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 I.C – Compliance Schedules:

The permittee shall submit quarterly progress reports, both to EPA and NMED, in accordance with the following schedule: January 1, April 1, July 1, and October 1.

The permittee shall comply with the following schedule of activities for attainment of state water quality standards-based final effluent limitations for Total Nitrogen and Total Phosphorus:

a. *Evaluate and select control mechanisms by January 28, 2010*
b. *Provide a schedule to implement selected control measures by October 28, 2010*
c. *Attain final effluent limitations no later than four (4) years from permit effective date (2012).*

Findings for Section B – Recordkeeping and Reporting*:*

The permittee provided the inspector with bench sheets for the months of May and November 2010. The permittee failed to provide sampling location for Total Residual Chlorine (TRC) and pH.

The permittee was asked to perform TRC and pH. When the operator calibrated the pH meter for buffer of 7.00, the reading was 6.87; when calibrated for buffer 4.01, the reading was 3.97. When the operator

checked with buffer 10.00, the reading was 9.16. Standard Methods, 20th Edition, 4500 H^+ states that the use of a pH meter should be accurate and reproducible to 0.1 pH units. With a deviation greater than 0.1 pH unit it is an indication of a faulty electrode. When the operator was questioned as to when the electrode/membrane was changed last, he could not verify the date. No records of maintenance were kept for the pH meter.

The permittee sends Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS) and e. Coli to the Las Vegas Wastewater Treatment facility for analysis. The facility is approximately one-half hour away from Mora. The permittee has failed to do any chain of custody records to insure that the samples were received with proper preservation and within the allowable holding times for these parameters. The operator stated that he has never done chain of custody records for his samples sent to the Las Vegas Wastewater Treatment facility.

The permittee has failed to provide progress notes since August 2009. The permittee has not met the schedule of activities for attainment of state water quality standards. Specifically, the permittee has not submitted evaluation and selection of control mechanisms by January 28, 2010 nor has the permittee submitted a schedule of implementation for the selected control measures by October 28, 2010.

Section C – Operations and Maintenance: Overall rating of "Unsatisfactory"

Permit requirements, Part III. B. 6: Removed Substances

> *Unless otherwise authorized, solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.*

Permit requirements, Part III. B. 3: Proper Operation and Maintenance

> *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 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 operation is necessary to achieve compliance with the conditions of this permit.*

Findings for Operations and Maintenance:

Rakings from the bar screen are removed and placed near the influent channel with no containment. (see photo 1). This creates a potential for contaminated storm water runoff to reach the Mora River and not having vector control over the waste may pose a health issue. Raking should be kept in a closed container or placed on a cement pad that is bermed to prevent any runoff from occurring.

The Collection system is subject to excessive I&I from groundwater. The WWTP design flow is for 0.052 MGD and the reported flow through the WWTP is 0.54 MGD, ten times greater than the design flow.

The lagoons are heavily overgrown with weeds and on the dike between the ponds. There is evidence of rodent activity burrowing in the dike between the ponds and weakening the integrity of the dike.

The lagoons are lined with a geosynthetic plastic. The liners are torn and weeds are growing up through the liners. There is strong evidence that the lagoons do not fully contain the wastewater and the potential for contamination of groundwater may exist.

The aerators in the lagoon are not working and need to be replaced. This results in limited aerobic treatment activity in the lagoons. With this type of aeration the wastewater treatment plant should have standby power or generator onsite for use.

The chlorine treatment is by tablet dispersal within an enclosed pipe. Wastewater flows through the disinfection system within a few seconds. This method does not allow for the required detention time for disinfection to occur.

The facility is in the process of obtaining funding to build a new treatment plant and therefore has not expended any of its resources on the failing lagoon system. However, this system is still receiving raw sewage in the interim and needs to be operated and maintained to insure the Mora River is not impaired further.

Section D – Self-Monitoring: Overall rating of "Unsatisfactory"

Part I.A.1 of the Permit, The permittee is required to monitor pH on a daily basis.

Findings for Self-Monitoring:

The permittee provided the inspector with bench sheets for May and November of 2010. On the May 2010 bench sheets pH was taken on May 3, 2010. No pH values were reported on a daily basis for the remainder of the month. The permit requires daily analysis of pH.

Section E – Flow Measurements: Overall rating of "Unsatisfactory"

The permit requires in Part III. C. 6: Flow Measurement

> *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 flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes.*

Influent flow measurement is completed with a 3" Parshall flume with a secondary staff gauge. Influent measurements of flow will not precisely or accurately reflect the discharge from the plant. Correct effluent flow measurements must be made in order to calculate the required permit loading limitations, 30 and 7 day Biochemical Oxygen Demand (BOD) and Total Suspended Solid (TSS) averages. The discharge of effluent is through a 10" closed pipe.

The flow reading on the day of the inspection is captured in photograph #2. The staff gauge reading at 1011 hours appeared to be .72 (head), which indicates an influent flow of 0.3857 MGD. The permittee has consistently reported their flow in the past two years as .54 MGD which would require the head to be 0.90.

Section F – Laboratory: Overall rating of "Marginal"

Part III.C.5 – Monitoring Procedures, states:

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.*
c. *An adequate analytical quality control program, including 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:

As stated above, the permittee was asked to perform his daily monitoring of TRC and pH. The pH meter was more than 0.1 pH units when the pH meter was checked with a buffer of 10. The reading was 9.16 pH units. Standard Methods, 20th Edition, 4500 – H^+ requires a pH meter to be accurate and reproducible to 0.1 pH units.

When the operator performed the TRC analysis, it was noted that the USA Bluebook DPD Dispenser reagent had expired in February 2009. The operator also had available HACH PermaChem® reagent which expired in March 2009. This issue was brought to the operator's attention in a previous inspection done in 2009 when the inspector noted that the HACH reagent being used expired in March 2009. Because of this finding, it may indicate the operator continued to use the expired reagents for the daily TRC analyses. This questions the validity of these analyses.

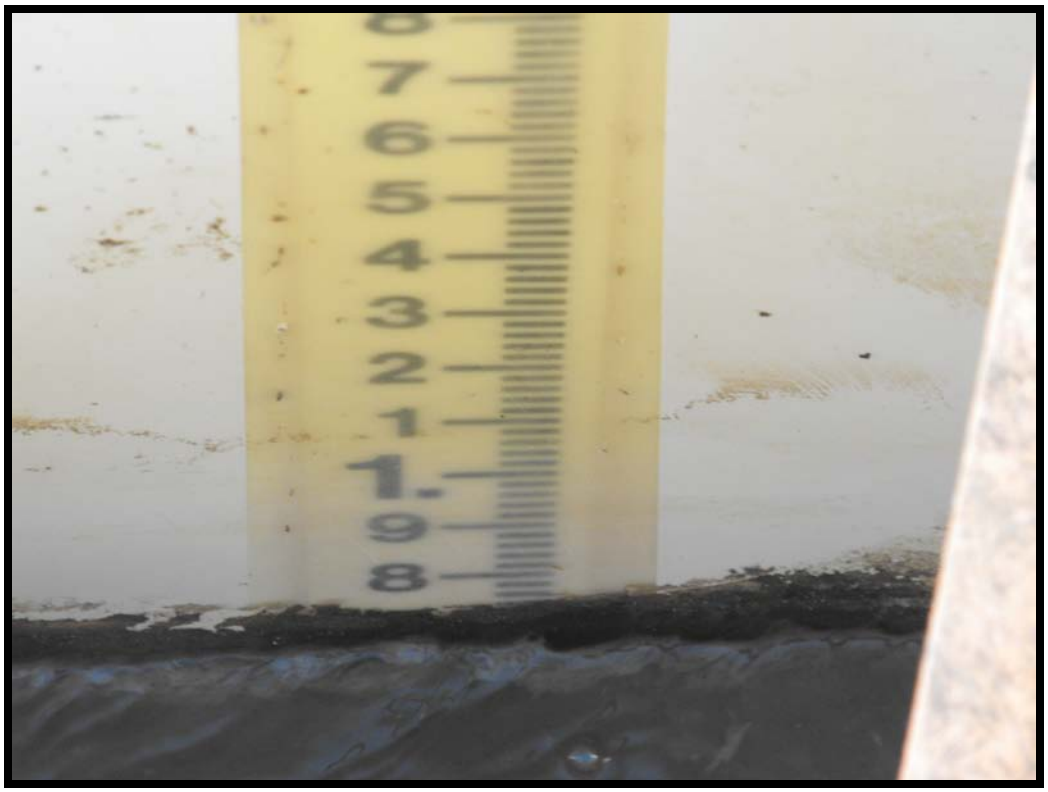
In a laboratory quality control program, precision is determined by the analysis of actual samples in duplicate. After review of the laboratory bench sheets, it does not appear that the permittee is doing duplicate samples at least 10% of the time.

NMED/SWQB
Official Photograph Log
Photo #1

Photographer: Daniel Valenta	Date: March 30, 2011	Time: 1010 Hours
City/County: Town of Mora /Mora County		
Location: Mora Mutual Domestic Water and Sewer Association Treatment Plant. Influent channel-SW side of plant.		
Subject: Removed debris from barscreen at the influent channel.		

NMED/SWQB
Official Photograph Log
Photo #2

Photographer: Daniel Valenta	Date: March 30, 2011	Time: 1011 Hours
City/County: Town of Mora/Mora County		
Location: Influent flow channel – Southwest side of plant		
Subject: Staff gauge in Parshall flume at influent channel. (Appears to be .72)		



NMED/SWQB
Official Photograph Log
Photo #3

Photographer: Daniel Valenta	Date: March 30, 2011	Time: 1034 Hours
City/County: Town of Mora/Mora County		
Location: Mora Mutual Domestic Water & Sewer Association Treatment Plant		
Subject: Effluent discharge pipe sampling, south side of the facility.