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RYAN FLYNN
Cabinet Secretary

BUTCH TONGATE
Deputy Secretary

Certified Mail - Return Receipt Requested

July 29, 2014

Mr. Kenneth L. Garcia, Utilities Director
City of Las Vegas
905 12th Street
Las Vegas, NM 87701

**Re: Town of Las Vegas Waste Water Treatment Plant; Major; Municipal; SIC 4952; NPDES
Compliance Evaluation Inspection; NPDES Permit NM0028827; June 11, 2014**

Dear Mr. Garcia:

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.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Racquel Douglas
US Environmental Protection Agency, Region VI
Enforcement Branch (6EN-WM)
1445 Ross Avenue
Dallas, Texas 75202-2733

Bruce Yurdin
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 Barbara Cooney at (505) 827-0212 or at barbara.cooney@state.nm.us.

City of Las Vegas
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Sincerely,

/S/ Bruce J. Yurdin

Bruce J. Yurdin
Program Manager
Point Source Regulation Section
Surface Water Quality Bureau

cc: Rashida Bowlin, USEPA (6EN-AS) by e-mail
Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
Raquel Douglas, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN) by e-mail
Robert Italiano, NMED District II, by e-mail



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 8 2 7 11 12 1 4 0 6 1 1 17 18 C 19 S 20 1					
Remarks					
M A J O R L A S V E G A S W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	-----Reserved-----	
67 1 69	70 3	71 N 72 N 73	74 75	M A J 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) East Frontage Road of I-25 Las Vegas, NM 87701 City of Las Vegas WWTP. From I-25 N, take Exit 343, turn right onto NM 518, immediately turn right onto frontage road, travel south to signed entrance, turn left, continue approximately ¼ mile, cross railroad tracks, turn left, travel to locked gated entrance. San Miguel County	Entry Time /Date 10:50 Hours / June 11, 2014	Permit Effective Date October 1, 2011
	Exit Time/Date 16:08 Hours / June 11, 2014	Permit Expiration Date September 30, 2016
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) Robert Espinosa, Operator - Supervisor, 505-429-9950 Roger Griego, Operator Jesus Hathaway, Operator - Supervisor	Other Facility Data SIC 4952 Latitude: 35.56655600 decimal degrees Longitude: -105.21171900 decimal degrees	
Name, Address of Responsible Official/Title/Phone and Fax Number Kenneth L. Garcia 505- 426-3310 Utilities Director 1700 North Grand Avenue Las Vegas, NM 87701	Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Section C: Areas Evaluated During Inspection

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

S	Permit	M	Flow Measurement	U	Operations & Maintenance	N	CSO/SSO
U	Records/Reports	S	Self-Monitoring Program	U	Sludge Handling/Disposal	N	Pollution Prevention
M	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
M	Effluent/Receiving Waters	S	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) /S/ Barbara Cooney	Agency/Office/Telephone/Fax NMED/SWQB 505-827-0212 / 505-827-0160	Date 7/29/2014
Signature of Management QA Reviewer /S/ Shelly Lemon	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-827-2819 / 505-827-0160	Date 7/30/2014

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: SLUDGE RECORD HAVE NOT BEEN RECEIVED BY NMED FOR 2013. This is the reason for the Unsatisfactory rating.

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: See Further Details Section of this report.

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. NOT EVALUATED

 Y N NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

 Y N NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED. NOT EVALUATED

 Y N NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR? Y N NA
 IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED? Y N NA
 HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS? Y N NA
10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT? Y N NA
 IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT? Y N NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED 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. Y N NA
3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. Y N NA
4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION 2013 by Yukon – no monthly check by operators)
 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

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. 10__% OF THE TIME. Y N NA
6. SPIKED SAMPLES ARE ANALYZED. YEARLY__% OF THE TIME. Y N NA
7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME Hall Environmental Bio AquaticsLAB ADDRESS Albuquerque, NM Carlton, TXPARAMETERS PERFORMED Total Nitrogen / Total Aluminum Whole Effluent Toxicity**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	SLIGHT	NONE	SLIGHT	TAN	NONE

RECEIVING WATER OBSERVATIONS
TURBID: FLOATING SOLIDS & EFFLUENT EXCEEDENCES FOR TOTAL ALUMINUM**SECTION H - SLUDGE DISPOSAL**SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED YES __).
DETAILS: Sludge DMRs for 2013 have not been received by NMED – this is the reason for the Unsatisfactory Rating.

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: Surface Disposal (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

City of Las Vegas Wastewater Treatment Plant
Compliance Evaluation Inspection
NPDES Permit Number NM0028827
June 11, 2014
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Introduction

On June 11, 2014 a Compliance Evaluation Inspection was conducted at the City of Las Vegas Wastewater Treatment Plant (WWTP) by Barbara Cooney, Shelly Lemon, and student intern Chrys Kamgaing of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB), Point Source Regulation Section (PSRS).

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 to evaluate compliance with the NPDES permit program. This inspection report is based on information supplied by the City of Las Vegas representatives (the permittee), observations made by the NMED Inspector, reports and records kept by the permittee or NMED.

The WWTP is classified as a major municipal discharger, with a design flow of 2.5 million gallons per day (MGD) and is assigned the NPDES permit number NM0028827. The SIC code for this facility is 4952. The discharge from the WWTP enters an enclosed pipe approximately 500 feet long that discharges to the Gallinas River in Segment 20.6.4.220 NMAC of the Gallinas River in the Pecos River Basin. The designated uses are irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

Inspection Details

The inspector arrived at the WWTP at 10:50 hours on June 11, 2014, showed credentials and discussed the purpose of the inspection with Mr. Robert Espinosa, Plant Operator Manager, Mr. Roger Griego, Plant Operator and Laboratory Technician and later with Mr. Jesus Hathaway. An exit interview was conducted following the inspection and records review, with Mr. Kenneth Garcia Utilities Director, Mr. Dan Cole, Water Systems Manager, Mr. Espinosa, Mr. Griego and Mr. Hathaway. The inspectors left the City of Las Vegas facilities at 15:58 hours.

Treatment Units

Raw sewage gravity flows to the headworks, passes through a manual bar screen and cylindrical solids removal system, followed by the aerated grit chamber. Beyond the grit removal, it flows through a lift station that sends the wastewater to the above ground basins. The flow is split to parallel treatment trains, the East and West basins. The 22 feet deep aeration (AB) basins have an aerobic zone, an intermediate zone and an anoxic (AO) zone. Solids are wasted from these basins to a thickener before being sent to the aerobic digester. The solids are wasted every two hours. Operators stated that the optimum Mixed Liquor Suspended Solids (MLSS) in the summer is 2200 mg/L and 3700 to 3900 in the winter when the microbes are less active. When the wastewater has passed through each phase, the decant flows by gravity to the two secondary clarifiers, also run parallel. Following the clarifiers is an inline micro filtration system located before the Ultraviolet disinfection system, effluent flow measurement and discharge pipe to the Gallinas River or to reuse. For much of the year, a large portion of the effluent is diverted to reuse for parks, cemeteries and other municipal areas. The reuse water is covered under the New Mexico Environment Department, Ground Water Quality Bureau Discharge Permit number DP-1118.

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Sludge

Waste Activated Sludge (WAS) is pulled from the basins and sent to the aerobic digesters. Wasting of solids is approximately 67,000 gallons per day, set on two hour cycles. There was at least a 4 foot sludge blanket in the secondary clarifiers, with a diffuse blanket another several feet above. Final disposal is at the surface disposal site owned by the city. The solids taken to the surface disposal site are approximately 2% of the total volume.

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 Verification – Overall Rating of “Satisfactory”

Section B – Record Keeping and Reporting – Overall Rating of “Unsatisfactory”

Permit Requirements for Record Keeping and Reporting

The permit states in Part III.D. Reporting Requirements:

*4. Discharge Monitoring Reports And Other Reports
Monitoring results must be reported on Discharge Monitoring Report (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 in Part III.D. II and all other reports required by Part III.D. to the EPA at the address below. Duplicate copies of DMR’s and all other reports shall be submitted to the State agency (ies) at the following address (es):*

*EPA:
Compliance Assurance and Enforcement Division
Water Enforcement Branch (6EN-W)
U.S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733*

*New Mexico:
Program Manager
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 26110
1190 Saint Frances Drive
Santa Fe, NM 87502*

The permit states in Part III.D. Reporting Requirements: 7. Twenty-four Hour Reporting:

a. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall be

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provided within 5 days of the time the permittee becomes aware of the circumstances.

The report shall contain the following information:

- (1) A description of the noncompliance and its cause;*
- (2) The period of non compliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and,*
- (3) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.*

The permit requires in Part III.C. Monitoring Records: 3. *Retention Of Records:*

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, 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 date of the sample, measurement, report, or application. This period may be extended by request of the Director at any time.

The permit requires in Part III.C. Monitoring Records: 4. *Records Contents:*

Records of monitoring information shall include:

- a. The date, exact place and time of sampling or measurement.
- 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 techniques or methods used;
- f. The results of such analyses.

Findings for Record Keeping and Reporting

1. Sludge Records for 2013 have not been submitted. This is the reason for the Unsatisfactory rating. Following the inspection, Mr. Espinosa and Mr. Griego met with the inspector in Santa Fe to go over record reporting for sludge. At the time this inspection report was finalized, DMRs with the sludge reporting have not been received by NMED.

2. As part of this inspection, records were reviewed for the first quarter of 2014, including the months of January February and March, for laboratory and operations and maintenance. Records contained the required information and were consistent with reporting on the Discharge Monitoring Reports.

Records provided to the Inspector include laboratory bench sheets for:

Flow

Biochemical Oxygen Demand5 day (BOD5)

Total Suspended Solids (TSS)

pH

E. coli

Aluminum

Cadmium

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Total Residual Chlorine
Total Ammonia
Whole Effluent Toxicity Tests

3. DMR reports were submitted late for the months of October 2011, November 2011, December 2011 and January 2012. In a letter from the permittee dated February 29, 2012, the reason was a personnel issue that has been resolved.

4. The DMRs require the reporting of the percent removal of the Biochemical Oxygen Demand (BOD) and Total Suspended Solids (TSS). The permittee is not reporting the actual value of the percent solids removed, rather the value being reported is simply written as, " > 85% ". The actual value of the percent removed should be reported.

5. The permittee did not meet the sample frequency requirements for Total Cadmium and Total Aluminum, October 2011, November 2011, December 2011 and September 2013.

6. The US EPA is encouraging permittees to transition to the Net DMR paperless reporting system. Information may be found at the website: <http://www.epa.gov/netdmr/>

Section C - Operation and Maintenance – Overall Rating of “Unsatisfactory”

Permit Requirements for Operation and Maintenance

The 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 system 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...

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

Part II Pre Treatment Language

D. CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

a. The following pollutants may not be introduced into the treatment facility:

(1) Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;

(2) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works are specifically designed to accommodate such discharges;

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(3) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

(4) Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

(5) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

(6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

(7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

b. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Act, including any requirements established under 40 CFR Part 403.

c. The permittee shall provide adequate notice of the following:

(1) Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Act if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

Any notice shall include information on (i) the quality and quantity of effluent to be introduced into the treatment works, and (ii) any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

E. PRETREATMENT INDUSTRIAL SURVEY REQUIREMENTS

The permittee shall comply with the pretreatment requirements in 40 CFR 403, as specified in the following schedule of compliance. The results are due 6 months from the effective date of the permit.

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Submit to the U. S. Environmental Protection Agency results of an industrial user survey which consists of a qualitative analysis of pollutants being contributed by all industrial sources in its entire municipal system (including all treatment plants). The industrial users should be asked to provide information on the type and approximate quantity of pollutants discharged into the system. This information may be derived from knowledge of the facility's process, and should not require any sampling at the source.

Findings for Operation and Maintenance

During the site visit and the records review of the WWTP, the following observations were made:

1. The Dissolved Oxygen (DO) meters in the AB basin are not working. A hand DO meter is being used. It is suggested the continuous reading DO meters be replaced and records be maintained of those readings for the purpose of operational controls.
2. Sludge shearing was noted in the aeration basins in the aerated portion of the basin. This could be a result of too much turbulence in the basin and over oxygenation.
3. Secondary Clarifier – Sludge blanket were 4 feet thick with a diffuse layer of another several feet above. In the final clarifiers, sludge blankets should be kept to a minimum, at approximately 1 to 2 feet in depth.
4. Secondary Clarifier – Excessive algae growth was observed on the weirs. According to operators there was training the week of the inspection and no operators were available to do the regular maintenance. According to operators Clarifiers are scheduled to be cleaned Monday of every week.
5. Secondary Clarifiers – The weirs were observed to be uneven around the basin. Short circuiting was observed.
6. The micro filters before the UV disinfection system were off line for cleaning. The design included only one train so there are no back up when the filters are being cleaned.
7. Ultra Violet disinfection system. There were several UV bulbs pulled out for cleaning and were broken on the side of the basin. Cleaning is done by hand with an acid wash. There was some turbidity and some floating solids observed in the UV basin. This can reduce the efficacy of the disinfection.
8. Some turbidity and floating solids were observed in the effluent. This can be a result of the secondary clarifiers and the high sludge blanket maintained in combination with the micro filters being off line.

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9. Flow measurement – there is no back up meter and it is inaccessible to the operators in the the effluent flow channel. This is also discussed in the Flow Measurement portion of this report.
10. The Septage Receiving Station had signs of splash over and over flows to the ground.
11. Inadequate number of operational and maintenance staff. Several treatment units were not being maintained and/or were off line at the time of the inspection.
12. The city has plans to begin accepting liquid leaching waste from a landfill near the hospital. At this point the connection has not be constructed and there are no data about the waste that will enter the collection system. The permittee is advised, that this addition to the WWTP should be monitored closely. They are required in the permit to reject any waste that could potentially cause harm to or interfere with the treatment process. It is advisable for the city to adopt local limits for the collection system and industrial contributors. Additionally a sanitary sewer survey of contributors could also assist in protecting the function of the WWTP and the effectiveness of the treatment process.
Information on the local limits and sewer survey can be found at the EPA website for Pretreatment at <http://water.epa.gov/polwaste/npdes/pretreatment/index.cfm>
13. September 2013 the state of New Mexico experienced extremely heavy rain storms. During that time this WWTP is estimated to have flow through of up to 8MGD per day, far above the design capacity. Several units overflowed and were beyond the control of operators. This condition was experienced state wide as well.

Section D – Self Monitoring – Overall Rating of “Satisfactory”

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

Permit Requirements for Flow Measurements

The permit requires in Part III 5. MONITORING PROCEDURES

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

Findings for Flow Measurements

1. The flow meter was calibrated by the contract service Yukon in 2013. It is due to be recalibrated. Though this outside service comes once a year, it is important for the operators to be able to check the calibration more frequently. This is normally done with a back-up flow meter and stationary staff gauge. The way this effluent channel is constructed makes any back

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up check impossible to access. It is a design problem that only reconfiguring the outfall could address.

Section F - Laboratory - Overall Rating of "Satisfactory"

Permit Requirements for Laboratory

The permit requires, in Part III, Section B.3. , Proper Operation and Maintenance

a. ...Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures...

The permit requires, in Part III, Section 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 the permit or approved by the Regional Administrator.

Findings for Laboratory

1. The permittee was out of the needed pH buffers required for meter calibration before sample analysis. According to operators, because it was the end of the fiscal year for the City, no money was available to purchase the needed buffers. After July 1, 2014 money was expected to be available and purchases could be made. Proper calibration of equipment is a permit requirement and is not optional.

Section G - Effluent and Receiving Water - Overall Rating "Marginal"

Permit Requirements for Effluent / Receiving Waters

EFFLUENT CHARACTERISTICS		DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
		Standard Units			
POLLUTANT	STORET CODE	MINIMUM	MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
pH	00400	6.6	9	Daily	Grab

EFFLUENT		DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
		lbs/day, unless noted			mg/l, unless noted				
POLLUTANT	STORET CODE	30-D	D A	7-DAY AVG	30-DA	D A	7-DAY	MEASUREMENT	SAMPLE TYPE
Flow	50050	R e p	R e p	Re po rt	***	***	***	Contin uous	Totalizing Meter
Biochemical Oxygen Demand, 5-	80082	626	N/A	939	30	N/A	45	One/ Week	6-Hour Composite

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Biochemical Oxygen Demand, 5-	50076	≥ 85% (*5)	N/A	N/A	N/A	N/A	N/A	One/Week	Calculation (*5)
Total Suspended Solids	00530	626	N/A	939	30	N/A	45	One/Week	6-Hour Composite
Total Suspended Solids, % removal, minimum	81011	≥ 85% (*5)	N/A	N/A	N/A	N/A	N/A	One/Week	Calculation (*5)
E. Coli Bacteria (*2)	51040	N/A	N/A	N/A	126 (*2) cfu/100 ml	410 (*2) cfu/100 ml	N/A	One/Week	Grab
Aluminum, Total	01105	1.38	2.076	N/A	66.37 ug/l	99.55	N/A	Three/	Grab
Cadmium, Total	01027	0.010	0.015	N/A	0.491 ug/l	0.736	N/A	Three/	Grab
Total Residual Chlorine	50060	N/A	N/A	N/A	N/A	11 ug/l (*3)	N/A	Daily	Instantaneous Grab (*3)
Total Ammonia	00610	83	125	N/A	4	6	N/A	Three/	Grab

Finding for Effluent / Receiving Waters

1. The water exiting the WWTP at the time of the inspection was turbid and floating solids were observed.
2. A review of the discharge monitoring reports indicates that effluent exceedences have occurred for:
 Total Aluminum: December 2013, November 2013, September 2013,
 E. coli Bacteria: September 2013

Section H - Sludge Handling and Disposal - Overall Rating of “Unsatisfactory”

Permit Requirements for Sludge Disposal

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.

40CRF Part 503 Subpart A. General Provisions states:

(y) *Store or storage of sewage sludge* is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

Findings for Sludge Handling and Disposal

Sludge DMR reports have not been submitted for 2013. This is the reason for the Unsatisfactory rating for this section.

NMED/SWQB
Official Photograph Log
Photo # 1

Photographer: Chrys Kamgaing

Date: 11 June 2014

Time: 10:59 a.m.

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Headworks Bar Screen



NMED/SWQB
Official Photograph Log
Photo # 2

Photographer: Chrys Kamgaing

Date: 11 June 2014

Time: 10:59 a.m.

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Headworks Bar Screen – grit removal system



NMED/SWQB
Official Photograph Log
Photo # 3

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:08 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Splitter box following headworks



NMED/SWQB
Official Photograph Log
Photo #4

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:35 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: AB Basin – anoxic zone



NMED/SWQB
Official Photograph Log
Photo #5

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:35 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: AB basin – intermediate zone. The Dissolved Oxygen probes were not working in this basin.



NMED/SWQB
Official Photograph Log
Photo # 6

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:41 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: AB basin – Returned Activated Sludge



NMED/SWQB
Official Photograph Log
Photo # 7

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:42 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Decant from the AB basins going to the Secondary Clarifiers.



NMED/SWQB
Official Photograph Log
Photo # 8

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:44 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Anoxic zone in the AB basin. Note the floating foam and the particulate solids that have made it through the headworks. Some portions of these solids are also making it to the secondary clarifiers.



NMED/SWQB
Official Photograph Log
Photo # 9

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:44 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Another view of Anoxic zone in the AB basin. Note the floating foam and the particulate solids that have made it through the headworks. Some portions of these solids are also making it to the secondary clarifiers. Note the DO probe. These DO probes should be repaired or replaced.



NMED/SWQB
Official Photograph Log
Photo # 10

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:45 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: The old raceway treatment system that is no longer in use. This system is still plumbed in so that it can be used for excess wastewater in the event of an emergency.



NMED/SWQB
Official Photograph Log
Photo #11

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:19 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Sludge Thickener



NMED/SWQB
Official Photograph Log
Photo # 12

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:23 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Septage Receiving Station shows signs of over flow and splash out. Better containment for this area to prevent any raw septage from reaching bare ground is suggested.



NMED/SWQB
Official Photograph Log
Photo # 13

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:54 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Secondary Clarifiers – weirs have heavy algae growth, floating solids in the basin that are being scraped off into the scum trough, and weirs were uneven.



NMED/SWQB
Official Photograph Log
Photo # 14

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:57 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Subject: Secondary Clarifiers – weirs have heavy algae growth, floating solids in the basin that are being scraped off into the scum trough, and weirs were uneven.



NMED/SWQB
Official Photograph Log
Photo # 15

Photographer: B. Cooney

Date: 11 June 2014

Time: 11:56 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Secondary Clarifiers – sludge judge showed 3- 4 foot sludge blanket with several feet of dispersed solids above.



NMED/SWQB
Official Photograph Log
Photo # 16

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:02 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Micro filters prior to disinfection. The filter on the right was going to be cleaned. The filter on the left is new.



NMED/SWQB
Official Photograph Log
Photo # 17

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:06 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Ultraviolet Disinfection Channel with two banks of lights.



NMED/SWQB
Official Photograph Log
Photo # 18

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:09 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Ultraviolet Disinfection Channel – the water in the channel was turbid and had floating solids.



NMED/SWQB
Official Photograph Log
Photo # 19

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:07 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Ultraviolet lights – one bank taken out for cleaning and repair. The lights are very fragile, some of the bulbs were broken when they were pulled up for maintenance.



NMED/SWQB
Official Photograph Log
Photo # 20

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:12 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Effluent –floating solids and turbidity was noted.



NMED/SWQB
Official Photograph Log
Photo # 21

Photographer: B. Cooney

Date: 11 June 2014

Time: 12:16 Hours

City/County: Las Vegas / San Miguel

State: New Mexico

Location: City of Las Vegas Wastewater Treatment Plant

Subject: Effluent flow meter and staff gauge is inaccessible.

