



NEW MEXICO
ENVIRONMENT DEPARTMENT



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lt. Governor

Harold Runnels Building
1190 South St. Francis Drive (87505)
P.O. Box 5469, Santa Fe, NM 87502-5469
Phone (505) 827-0187 Fax (505) 827-0160
www.env.nm.gov

RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

Certified Mail – Return Receipt Requested

August 17, 2015

Colonel Benjamin R. Maitre
Commander 27th Special Operations Wing
100 South Air Commando Way
Cannon Air Force Base, New Mexico 88103-5214

Re: Cannon Air Force Base (CAFB); Waste Water Treatment Plant; Minor; Individual Permit; SIC 4952; NPDES Compliance Evaluation Inspection; NM0030236; July 8, 2015

Dear Colonel Maitre:

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.

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)
Fountain Place
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 Erin Trujillo at 505-827-0418 or at erin.trujillo@state.nm.us.

Cannon Air Force Base; NM0030236

August 17, 2015

Page 2 of 2

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
Racquel Douglas, USEPA (6EN-WM) by e-mail
Gladys Gooden-Jackson, USEPA (6EN-WC) e-mail
Brent Larsen/Tung Nguyen, USEPA (6WQ-PP) by e-mail
Bill Chavez, NMED District I by e-mail
John Rebman, Water Quality Program Manager, Environmental, CAFB by e-mail



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

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
1 N 2 5 3 N M 0 0 3 0 2 3 6 11 12 1 5 0 7 0 8 17 18 C 19 S 20 4					
Remarks					
U S A I R F O R C E B A S E W W T P					
Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved	
67 69	70 4	71 N	72 N	73	74 75 M I N O R 80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) Cannon Air Force Base Waste Water Treatment Plant (WWTP), 400 North Perimeter Road, Cannon AFB NM 88103. From US 60/84 (west of Clovis, NM), take CAFB exit, turn south and follow signs to Visitor Entrance Station. Curry County.	Entry Time /Date 0815 hours / 07/08/2015	Permit Effective Date September 1, 2011
	Exit Time/Date 1205 hours / 07/08/2015	Permit Expiration Date August 31, 2016
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) John Rebman, Water Quality Program Manager, Environmental, CAFB / 575-784-1099, fax 784-1093 Jesse Frogge, Level IV Operator, National O&M, Inc. / 575-784-3990 Brenda Schiller, Level IV Operator, National O&M, Inc. / 575-784-3990	Other Facility Data <u>WWTP Entrance</u> Latitude N. 34.391373° Longitude W. -103.304158° SIC 4952	
Name, Address of Responsible Official/Title/Phone and Fax Number Colonel Benjamine R. Maitre, Commander 27th Special Operations Wing 100 South Air Commando Way, Cannon Air Force Base, New Mexico 88103-5214 / 575-784-2727	Contacted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Outfall 001 (Playa Lake) Outfall 002 (Golf Course Pond)		

Section C: Areas Evaluated During Inspection

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

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

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

1. SEE ATTACHED CHECKLIST REPORT WITH FURTHER EXPLANATIONS.

Name(s) and Signature(s) of Inspector(s) Erin S. Trujillo /s/Erin S. Trujillo	Agency/Office/Telephone/Fax NMED/SWQB/505-827-0418	Date 08/05/2015
Signature of Management QA Reviewer Sarah Holcomb /s/Sarah Holcomb	Agency/Office/Phone and Fax Numbers NMED/SWQB/505-827-2798	Date 08/05/2015

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS S M U NA (FURTHER EXPLANATION ATTACHED *No*)
 DETAILS: **CAFB's renewal application was received by USEPA on 06/13/2013. EPA's administratively complete letter is dated 02/25/2015. Application includes design flow increases (1.13 MGD). Permit mailing/street address is Permittee's main contact.**

- 1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE. **Renewal application updates address. See above.** Y N NA
- 2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES **See above.** 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: **Permittee's NetDMR subscriber agreement was approved 02/08/2012. Permittee uses electronic reporting system. Reviewed February 2015 records/reports. Records have required information, but clarifications on forms are recommended.**

- 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, TIMES(S) AND LOCATIONS(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. **Written/printed lists readily available Maintain It-Program** 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: **Operations & maintenance of the WWTP is satisfactory. Emergency treatment controls (back ups) described, but written document not readily available. Sanitary sewer overflows in collection system occurred 02/10/15, 12/16/14, and 09/16/13.**

- 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. **Maintain It-Program** 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. **Written controls not documented.** Y N NA

Cannon Air Force Base Waste Water Treatment Plant – 07/08/2015

PERMIT NO. **NM0030236**

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

PERMITEE SELF-MONITORING MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No).
 DETAILS: **Reviewed February 2015 records/reports.**

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 PERMITEE'S SELF-MONITORING REPORT? Y N NA

SECTION E - FLOW MEASUREMENT

PERMITEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED No)
 DETAILS:

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED. Y N NA
 TYPE OF DEVICE **9-inch Parshall flume (Outfall 001) and Fischer & Porter Mag Flow Meter (Outfall 002)**

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. **Flume (1/Qtr); Meter (N/A unless converter replaced)** 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. **Meter Range 0 - 1000 GPM** Y N NA

SECTION F - LABORATORY

PERMITEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED Yes)
 DETAILS: **On-site lab conducts pH, TRC, E.coli, TSS, & BOD5. Commercial laboratory(s) not inspected.**

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES) **See comments above.** 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. **E.Coli, TSS and BOD5 = 100** % OF THE TIME. Y N NA
- 6. SPIKED SAMPLES ARE ANALYZED. **TSS = Yes, pH = 100 %** % OF THE TIME. Y N NA
- 7. COMMERCIAL LABORATORY USED. Y N NA

LAB NAME **1) Ana-Lab Corp, 806-353-4425** **2) Bio-Aquatic Testing, Inc., 972-242-7750**
 LAB ADDRESS **P.O. Box 9000, Kilgore, TX 75663** **2501 Mayes Road, Ste 100, Carrollton, TX 75006**
 PARAMETERS PERFORMED **Sludge (metals, PCBs, %Solids)** **WET**

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	None						
002	No Discharge						

RECEIVING WATER OBSERVATIONS: **There have been no reported exceedance of effluent limitations during the permit term.**

SECTION H - SLUDGE HANDLING/DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. S M U NA (FURTHER EXPLANATION ATTACHED **No**).

DETAILS: **Permittee maintains recordkeeping / certifications that biosolids are treated to Class A Compost requirements.**

- 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: **Federal Facility WWTP** (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

Cannon Air Force Base – Waste Water Treatment Plant
NPDES Permit No. NM0030236
Compliance Evaluation Inspection
July 8, 2015

Further Explanations

Introduction

On July 8, 2015, Erin Trujillo of the New Mexico Environment Department (NMED), Surface Water Quality Bureau (SWQB) conducted a Compliance Evaluation Inspection (CEI) at the Cannon Air Force Base (CAFB) waste water treatment plant (WWTP) approximately 5 miles west of Clovis in Curry County, New Mexico. The current permit indicates that the WWTP has a design flow of 0.75 million gallons per day (MGD) at each outfall and is classified as a minor industrial discharger under the federal Clean Water Act, Section 402, of the National Pollutant Discharge Elimination System (NPDES) permit program. It is assigned NPDES permit number NM0030236, which regulates discharge of treated effluent from outfall 001 to North Playa Lake and outfall 002 to Golf Course Pond at CAFB in the Southern High Plains River Basin *State of New Mexico Standards for Interstate and Intrastate Surface Waters, 20.6.4 New Mexico Administrative Code (NMAC)*.

The NMED performs a certain number of CEIs each year for the U.S. Environmental Protection Agency (USEPA), Region VI. The purpose of this inspection is to provide the USEPA with information to evaluate the Permittee's compliance with the NPDES permit.

The inspector arrived at the CAFB WWTP at approximately 0815 hours on the day of this inspection. The inspector made introductions, explained the purpose of the inspection and presented credentials to Mr. Jesse Frogge, Level IV Operator & Contract Manager and Ms. Brenda Schiller, Level IV Operator & Laboratory Analysis, National O&M, Inc.; and Mr. John Rebman, Water Quality Program Manager, Environmental, CAFB. The inspector, Mr. Frogge, Ms. Schiller and Mr. Rebman toured the facility. Following the inspection, an exit interview to discuss preliminary findings was conducted with on-site permittee representatives. The inspector left the facility at approximately 1205 hours on the day of this inspection.

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. The Inspector obtained additional clarification on record keeping from permittee representatives on July 30, 2015.

Treatment Scheme

CAFB workforce population, approximately 5,800 military and civilian personnel, fluctuates due to personnel changes at the base. CAFB's WWTP receives wastewater from base buildings and housing, eating establishments (restaurants, cafeterias), one commissary, and industrial wastewater from various operations conducted at the base such as some aircraft washing and floor cleaning maintenance. To improve the collection system at the base, identified projects that are subject to available funding include repairs to sanitary sewer manholes; abandoning inactive lines, replacing cleanout pipes with caps, replacing cleanout caps, and repairing and replacing degraded sanitary sewer lines.

The treatment plant is a sequencing batch reactor (SBR) treatment system with chlorine disinfection and de-chlorination. Wastewater first enters the headworks with automatic screening system and bypass manual bar screen, Parshall flume, and grit and grease collection system with traveling bridge, grit pump, grit classifier with auger, grease blade, and grease auger, and influent pump station. Screenings removed from the headworks are allowed to dry in a concrete lined bed before disposal at the City of Clovis Solid Waste

Facility landfill. Diesel back-up generators are available on-site to run the headworks and main plant in the event of a power outage.

CAFB constructed two 9-million gallon storage basins, one for raw wastewater and the one to store treated effluent for reuse (irrigation) around the base. Use of the raw wastewater basin is intended for unsuitable material that may enter the treatment system (e.g., firefighting foam) or for temporary storage in the event the plant needs to be shut down for repairs or maintenance. CAFB uses a surfactant called Aqueous Film Forming Foam (AFFF) for aircraft maintenance activities and this agent has entered the plant causing foaming in the chlorine basin in the past. CAFB has reduced the frequency of AFFF foaming by capping drains that lead to the sanitary sewer system. According to on-site permittee representatives, there has been no recent foaming problems since capping drains.

After the headworks, influent pumps in the wet wells lift wastewater into the SBR basins. Secondary treatment system consists of two approximately 400,000 gallon basins (SBR#1 and SBR#2). Each basin operates with a 144 minute filling and 144 minute processing cycle (static fill, mixed fill, react fill, react, settle, decant, sludge waste and idle time). A Programmable Logic Controller (PLC) monitors various treatment indicators within the plant and controls the SBR phases based on information gathered from sensors and programmed timers. The facility operators can also manually override the PLC when necessary. SBR basins are aerated with fine diffused air supply to limit the breakup of flock supplied by three blowers and floating downdraft mixer pump. The SBR basins are decanted below the water surface to limit floatables from entering the disinfection and de-chlorination chamber.

An aerobic sludge digester, in common wall arrangement with the SBR basins, has coarse bubble aeration supplied by two blowers. Air supply for the aerobic digester is from the plant's two positive displacement blowers. Waste Activated Sludge (WAS) is withdrawn from the bottom of the digester by gravity or submersible sewage pump if necessary and sent to sludge drying beds.

Disinfection occurs in a chlorine contact basin where sodium hypochlorite solution is added at the head of the basin followed by mechanical mixing. The basin has baffles that create a serpentine flow through three narrow channels. Solids and grease that escape the SBR are manually removed by a slotted pipe skimmer. De-chlorination is done with sodium bisulfite solution in the last chamber of the chlorine contact chamber.

Treated effluent is piped to an on-site playa lake which is Outfall 001 (North Playa Lake) or diverted by a diaphragm pump to the effluent storage basin, then intermittently as needed for irrigation, piped to an on-site partially synthetically-lined golf course lagoon which is Outfall 002 (Golf Course Pond). A 190,000-gallon storage tank for treated effluent is no longer used except during contingencies. Diversion valves installed on the discharge line of the effluent storage basin can also be used to direct flow back to the headworks of the WWTP if the water is not acceptable for discharge. Treated wastewater and stormwater from both the North Playa Lake and Golf Course Pond is used for irrigation at CAFB.

The Permittee submitted a renewal application, received by USEPA on June 13, 2013, indicating that with completion of upgrades and expansion, the WWTP has an average daily design flow of 1.13 MGD. Daily maximum flow reported from September 2011 thru March 2015 ranged from 0.273 to 0.478 MGD for Outfall 001 and 0.121 to 0.359 MGD for Outfall 002, when Outfall 002 discharged. A copy of the treatment system flow diagram from the 2013 application is provided below (Figure 1).

For BOD5 and TSS monitoring, the facility defines a day from 0600 hours to 0590 hours for purposes of representative samples. For example, BOD5 and TSS samples and flow measurements taken between February 1 at 0600 hours and February 2 at 0559 hours would be recorded as data for February 1. Other monitoring that does not have calculations involving flow (e.g., pH and bacteria) is recorded on the calendar day that it was grabbed.

Solids Management

Sludge removed from the aerobic digester is placed into on-site drying beds for 120-180 days. Ten beds are available for storage and include center drains that collect liquid for return to the plant headworks. Sludge is no longer disposed at a landfill. Sewage sludge is stockpiled after being removed from the drying beds and further treated to reduce pathogens and to meet vector reduction requirements in 40 CFR 503 then land applied at the WWTP grounds. The facility is not considering land applying sewage sludge to other areas of the base at this time.

Approximately 40.0 dry metric tons are generated per year. Based on sewage sludge certifications and record keeping at the facility, CAFB has selected § 503.32(a) Alternative 5, in this case the density of Coliform in the sewage sludge shall be less than 100 Most Probable Number per gram of total solids (dry weight basis), to meet Class A pathogen requirements This alternative also requires that sewage sludge that is used or disposed shall be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in Appendix B of the 40 CFR 503. CAFB has selected PFRP composting (Option 1-Minimum 38 percent reduction in volatile solids), specifically in this case using the static aerated pile composting method--the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days. The facility does not add a bulking agent to the sewage sludge for aeration. CAFB has also selected a method for vector attraction reduction, in this case § 503.33(b)(1) the mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

Section B - Recordkeeping and Reporting Evaluation – Overall Rating of “S = Satisfactory”

Permit Requirements for Recordkeeping and Reporting

Part III.C (Standard Conditions, Record Contents) of the permit states:

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

5. *MONITORING PROCEDURES*

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

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....

Comments for Recordkeeping and Reporting

Permittee's recordkeeping, which includes electronic spreadsheets, log books, bench sheets, summary spreadsheets, summary tables, contained required contents in Part III.C.4 of the Permit. However, for some monitoring or measurement parameters, more than one record would need to be reviewed to obtain all required contents. In other words, records refer to other records for permit-required contents. Also, some information is recorded on more than one record which increases the potential for transcription errors. Recordkeeping clarifications or form revisions should be considered so that the documents used to determine compliance with monitoring and flow measurement conditions of the Permit are independent and self-contained—requiring no further explanation or referrals.

Below are specific examples:

- Flow meter calibration reports have location, but should have the applicable monitored discharge, in this case, Outfall 001 North Playa or Outfall 002 Golf Course Lake.
- Not all recorded times on pH data sheet (sample data) indicate if am or pm.
- pH worksheet has TRC result, but no other required TRC information.
- TRC worksheet also has pH results, but not all required pH information.
- Benchsheet for TSS refers to pH data sheet for time of sampling.
- Benchsheet for E.coli bacteria includes “*Date and Time of Analysis,*” but this is described by permittee representatives to be date and time of starting analysis. The date and time of analysis was described by permittee representatives as the “*Removed from Incubator: Date and Time.*”
- BOD worksheet refers to pH data sheet for time of sampling.
- BOD worksheet includes “*Date of Analysis,*” but this is described by the permittee representative and shown on the worksheet as the date of the initial dissolved oxygen (DO) reading, not date of the final DO reading.
- Effluent BOD worksheet does not include blank, seed correction and glucose-glutamic acid standards; and does not indicate that this information is recorded on the Influent BOD worksheet. In this case, referral on effluent worksheet to the influent worksheet would be appropriate to avoid transcription errors.

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

Permit Requirements for Operations and Maintenance

Part III.B.3.a (Proper Operation and Maintenance) of the Permit states:

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...

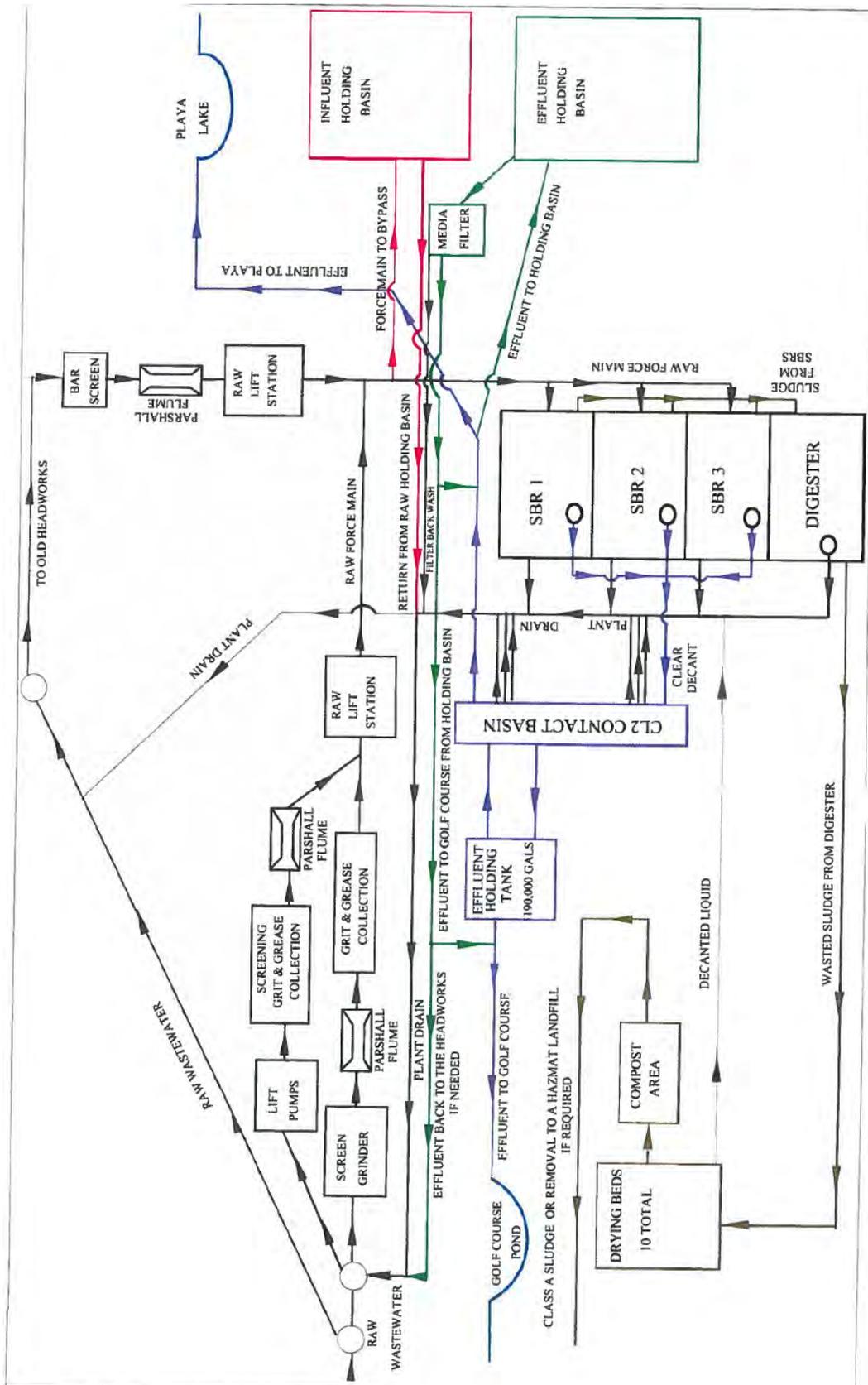
Findings for Operations & Maintenance

Operations and maintenance of the WWTP was satisfactory. Back up power and re-routing of flow thru the treatment system was described by on-site permittee representatives. Reports for Sanitary System Overflows (SSO) included information on corrective actions. However, procedures for emergency treatment control for the collection system and WWTP were not documented in written form and/or readily available.

Notes/Comments: Types of “emergencies” that may need alternative or additional treatment controls include, but are not limited to, loss of power, chlorination or de-chlorination failures, back up generator

failures, SSOs, bypasses, etc. Written emergency treatment controls could also address reporting requirements, management approvals/notifications, returning plant to normal maintenance operations, etc. Emergency treatment control procedures are important in training new employees and need to be periodically reviewed and updated.

Figure 1
WWTP Treatment System Flow Diagram, CAFB 2013 Renewal Application



NMED/SWQB Official Photograph Log Photo # 1		
Photographer: Erin S. Trujillo	Date: 07/08/15	Time: 0951 hours
City/County: West of Clovis / Curry County		State: New Mexico
Location: NM0030236, CAFB WWTP		
Subject: Some algae in water exists along edge of North Playa Lake near Outfall 001.		



NMED/SWQB Official Photograph Log Photo # 2		
Photographer: Erin S. Trujillo	Date: 07/08/2015	Time: 0957 hours
City/County: West of Clovis / Curry County		State: New Mexico
Location: NM0030236, CAFB WWTP		
Subject: Flow from Outfall 001 discharge entering lined channel before North Playa Lake.		

