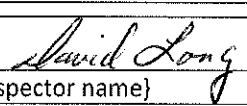
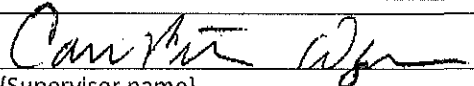


Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT

Inspection Date(s):	June 7, 2016		
Media:	Water		
Regulatory Program(s)	CWA 308[A][B]		
Company Name:	Jicarilla Apache Utility Authority		
Facility Name:	Dulce Wastewater Treatment Plant		
Facility Physical Location:	290 Narrow Gauge Road		
(city, state, zip code)	Dulce, New Mexico 87528		
Mailing address:	P.O. Box 507		
(city, state, zip code)	Dulce, New Mexico 87528-0507		
County/Parish:	Rio Arriba		
Facility Contact:	Cordell Tecube	Director – Environmental Protection Office	
	cltecube@yahoo.com		
FRS Number:	110013676290		
Identification/Permit Number:	NM0030520		
Media Number:	NA		
NAICS:	221320		
SIC:	4952		
Facility Representatives:	John Wheeler	Wastewater Director	575.759.4450
	Carradine Elote	Wastewater Manager	575.759.7421
	Spencer Wells	Operator	575.459.0060
EPA Inspectors:	David Long	6EN-WM	214.665.7323
	Mike Tillman	6EN-WM	214.665.7531
State Inspector(s):	None		
Other Inspector(s):	None		
Metadata	Title:	Dulce Wastewater Treatment Facility, Dulce, New Mexico, Rio Arriba County, New Mexico	
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX	
	Subject:	Dulce WWTP Compliance Evaluation Inspection Report (CEI)	
	Keywords:	Targeted inspection to meet ACS requirements	
EPA Lead Inspector Signature/Date			09/29/2016
	{Inspector name}		Date
Supervisor Signature/Date			09/29/2016
	{Supervisor name}		Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

A U.S. Environmental Protection Agency (USEPA) compliance evaluation inspection was performed at the City of Dulce Wastewater Treatment Plant located at 290 Narrow Gauge Road, Dulce, New Mexico on June 7, 2016. The inspection was conducted under the guidelines established by the USEPA under the National Pollutant Discharge Elimination System (NPDES) for wastewater treatment systems. This targeted site visit was performed as a part of the USEPA Region 6's annual ACS inspection commitment and its' purpose was to inspect and review current operations as compared to their NPDES permit requirements. An entry briefing was conducted by EPA-Region 6 inspector David Long at 9:30 a.m. and the inspector met with WWTP Manager Carradine Elote and Operator Spencer Wells who were present for the site tour, laboratory review and exit interview. John Wheeler, Wastewater Director, and Cordell Tecube, Director of the Environmental Protection Office, joined the inspection at 10:00 a.m. and were present for the remainder of the inspection. The EPA inspector was also accompanied by EPA inspector Mike Tillman. During the entry briefing, the EPA inspectors provided credentials and explained the purpose of the inspection

FACILITY DESCRIPTION

The facility is owned by the Jicarilla Apache Nation and operates under NPDES permit NM0030520 (effective August 1, 2014). It should be noted that, at the time of inspection, facility personnel could not produce a copy of their current permit. The Dulce WWTP is a minor municipal discharger with a design flow of 0.6 million gallons a day (MGD) and average daily flow of 0.250 MGD. The discharge from the WWTP is to Amargo Creek and eventually to the San Juan River Basin. The Dulce facility is in operation 24 hours each day and seven days per week with operators on site from 8:00 a.m. to 5:00 p.m. Monday through Friday. The facility has two licensed operators (Ms. Elote and Mr. Spencer) and one maintenance worker who is in the process of obtaining his Level 4 Wastewater Certification. However, based on the number of issues noted during this inspection, the facility would benefit from the addition of certified personnel to assist in the proper operation of this facility. One operator is on-call for evenings and weekends, however the facility lacks a Supervisory Control and Data Acquisition (SCADA) system to provide 24/7 monitoring of plant operations.

Treatment units at the facility include a lift station which feeds the influent to headworks which includes grit removal and a solids spiral removal system. From the headworks, flow is split and sent to Sequencing Batch Reactors (SBR) #1 and #2. From the SBR units, flow is sent to either Digester #1 or Digester #2. Solids from the digesters are sent to a belt press for drying before disposal at the City of Farmington Landfill. Decant effluent from the digesters is sent to a box filter for final solids removal prior to disinfection by a UV system. Final discharge flow rate is monitored by an American Sigma flow meter. The facility also maintains a nine inch Parshall flume as a primary flow measurement device.

During the entry briefing, the EPA inspector requested information regarding current operational status of the wastewater treatment plant. Ms. Elote provided the following list of equipment in need of repair and/or maintenance:

- A. Grit removal system – six months non-operational
- B. Belt press – Over 12 months non-operational
- C. Filter system prior to UV disinfection – more than six months non-operational
- D. Two of Five SBR blower motors were non-operational, with one being repaired during the inspection
- E. Decant valve in SBR #2 was also being replaced at the time of inspection
- F. Power was down to the facility's UV disinfection system and discharge flow meter, but would be operational once power was re-established in that part of the plant

Finally, Ms. Elote stated that the facility has developed plans to install a SCADA and call-out systems, but could not provide a timeline for their installation.

Section II - OBSERVATIONS

Following the entry briefing, a site tour was performed to observe the operational condition of the plant. The site tour showed that none of this facility's treatment units were being properly operated or maintained. At the lift station, signs of past overflows were noted on the grounds surrounding the wet well. Other areas of overflow were also noted adjacent to the belt press and SBR #2 (See Photo Log). Other indicators of poor general housekeeping included the discharge of cleaning water to the storm sewer system within the facility instead of proper disposal to the their facility's headworks, and the damaged sections of chain-link fence which would allow easy access to the facility after normal working hours and weekends. In addition to the non-operational equipment, none of the facility's meters had been recently calibrated including the Dissolved Oxygen Meter on the SBRs (last calibrated 04/16/2012) and the discharge flow meter (last calibrated 11/05/2007). Additionally, the facility's Parshall Flume lacked a staff gauge needed to calculate flow. Due to ongoing repairs at the time of inspection, flow to the facility's outfall was greatly reduced, however, observed flow had a slight yellow appearance and the area surrounding the outfall and beyond was covered with a layer of sludge indicating severe bulking within the treatment system due to the inoperative belt press and lack of solids wasting.

Following the site tour, facility paperwork used to generate DMR data would normally be reviewed for both precision and accuracy, but this facility has not submitted any DMRs since 2014 and no sample records, laboratory results, nor DMR calculation spreadsheets were available for review. Facility personnel indicated that samples had been collected, but the prior facility manager had taken all of the data prior to his replacement. It was suggested by the EPA inspector that the facility should request copies of results for any samples submitted to their analytical laboratory (Chem Labs in Farmington) to

prepare past due DMRs for submission, even if incomplete. Further, facility personnel were advised to begin collecting and properly analyzing samples for future DMRs.

Lastly, the City of Dulce WWTP laboratory was inspected for compliance with the 40 CFR 136 required analytical methods. It must be noted that any variation from the approved method can result in an invalidated sample, should the results ever be challenged in the court system. Therefore, any variations noted during this part of the inspection should be considered critical issues that require immediate attention. Issues noted during this part of the inspection including the use of their previous permit's monitoring requirements page from their previous permit instead of the current page regarding monitoring requirements (Pages 4 and 5 of Part 1 of their current NPDES permit). The facility utilizes a HACH Senslon1 pH meter and probe for pH analysis, but do not report the time of sample analysis on their data bench sheets which is needed to verify that samples are analyzed immediately as required by the procedure. Finally, the facility is using an unapproved pour method for their Total Suspended Solids analysis as required by Standard Methods and their Ohaus Explorer Pro balance has not been factory calibrated since 2008 (factory calibrations are required annually).

Section III – AREAS OF CONCERN

At the conclusion of the inspection, the EPA inspectors met with WWTP representatives for an exit interview at 11:30 a.m. on May 5, 2016. At that time, the inspectors provided details of the inspection and reviewed issues noted in the inspection that might require additional follow-up or correction. These issues included:

1. Facility has not submitted Discharge Monitoring Reports since 2014 and could not provide any laboratory data to indicate that samples had been collected and analyzed
2. An unacceptable number of treatment units were not in operating condition at the time of inspection (some have been out of service since their last EPA inspection in July 2015) including their influent grit pump, sludge belt press, and solids filtration/removal system. Due to the lack of proper solids removal and wasting, a layer of sludge was noted at the facility's outfall
3. The facility is not performing regular calibrations on their analytical equipment including the dissolved oxygen meter adjacent to SBR Basin #2 and discharge flow meter in the treatment plant, and the thermometers and balance in their laboratory
4. Good housekeeping at the facility is lacking as noted by the presence of dried solids on the ground adjacent to both the lift station, SBR Basins and sludge press. Additionally, during the inspection it was noted that wash water was being discharged to the storm sewer system and allowed to flow offsite. Finally, the security fence surrounding the facility was breached and had not been repaired
5. Facility personnel have failed to develop and/or implement quality assurance/quality control programs for spill response, laboratory operations, calibration of facility equipment, and maintenance of treatment units
6. Treatment plant has operators present less than 12 hours per day, but lacks any sort of afterhours monitoring system and/or callout system
7. In addition to their failure to annually calibrate their discharge flow meter, facility has not maintained their primary flow measurement device (keeping staff gauge clean and readable) to

- allow for periodic comparisons between their mechanical and electronic flow measurement devices.
8. Procedures used to perform Total Suspended Solids and pH are not in compliance with Standard Methods
 9. Facility could not provide a copy of their current permit and had posted in their laboratory the analytical requirements from their previous permit
 10. While facility has not wasted any sludge from their system for, at least, the past two years, the facility could not provide a sludge DMR for any of the years in which sludge was generated and disposed
 11. Lack of proper facility maintenance is an indication that the plant operations could be improved by the addition of at least one or two trained and licensed wastewater operators

The inspectors exited the site at 3:00 p.m.

Section IV – FOLLOW UP

Issue enforcement necessary to insure correction of noted issues and prevention of their reoccurrence.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log

Appendix One – Photo Log

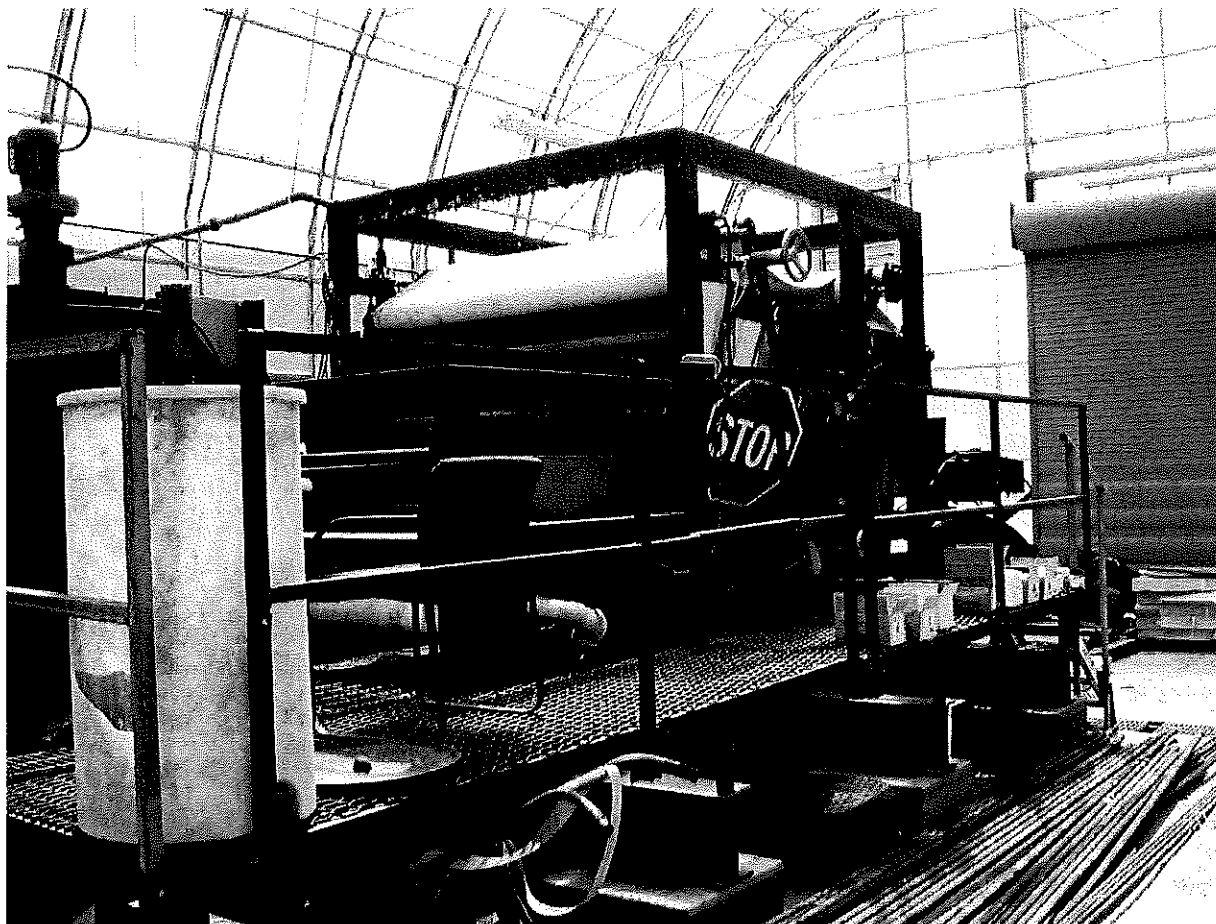


Photo File Name: P6070585

Date of Photo: 06/07/2017

Time of Photo: 10:55 a.m.

Photographer: David Long

Description: Sludge belt press has been out of operation for the past 12 months

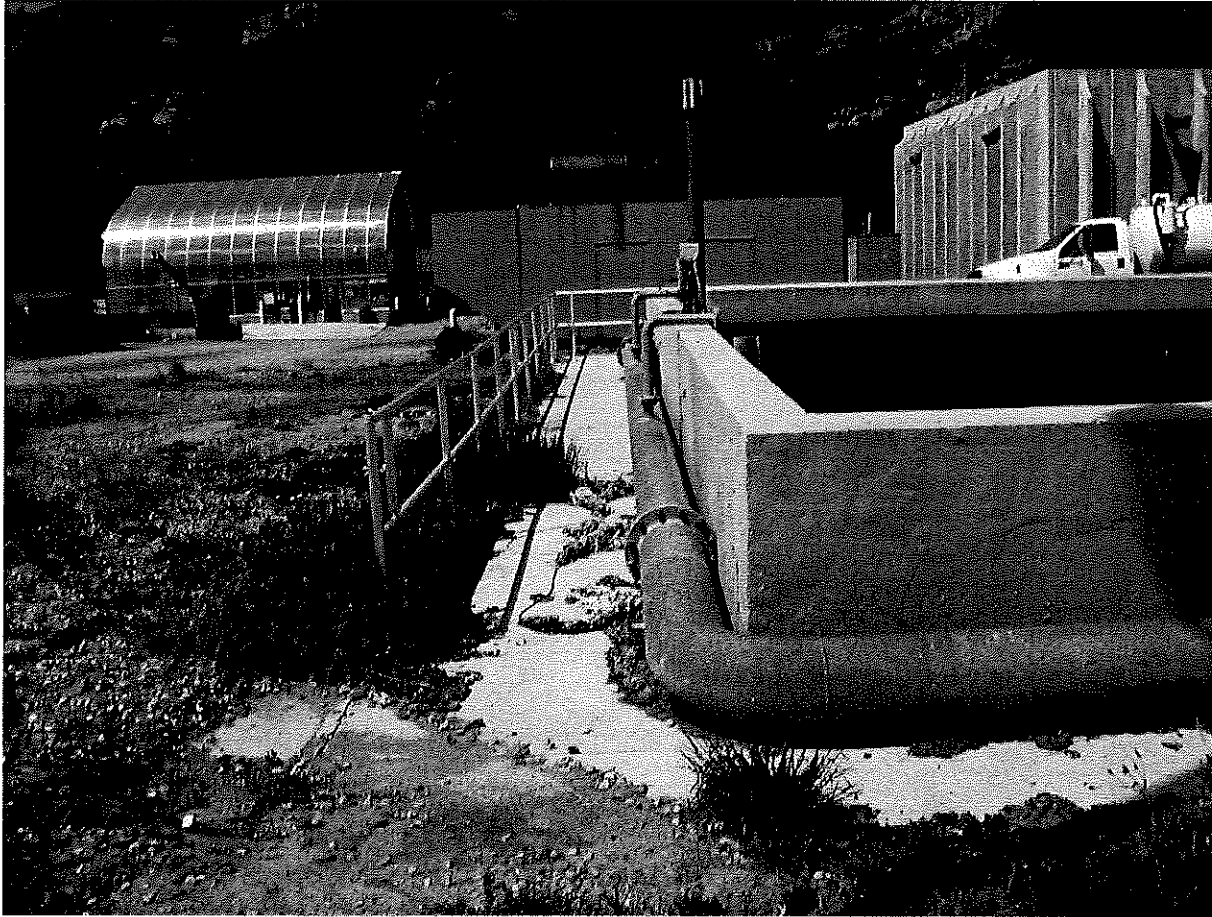


Photo File Name: P6070588

Date of Photo: 06/07/2017

Time of Photo: 11:06 a.m.

Photographer: David Long

Description: Spilled or overflowed sludge from SBR#2

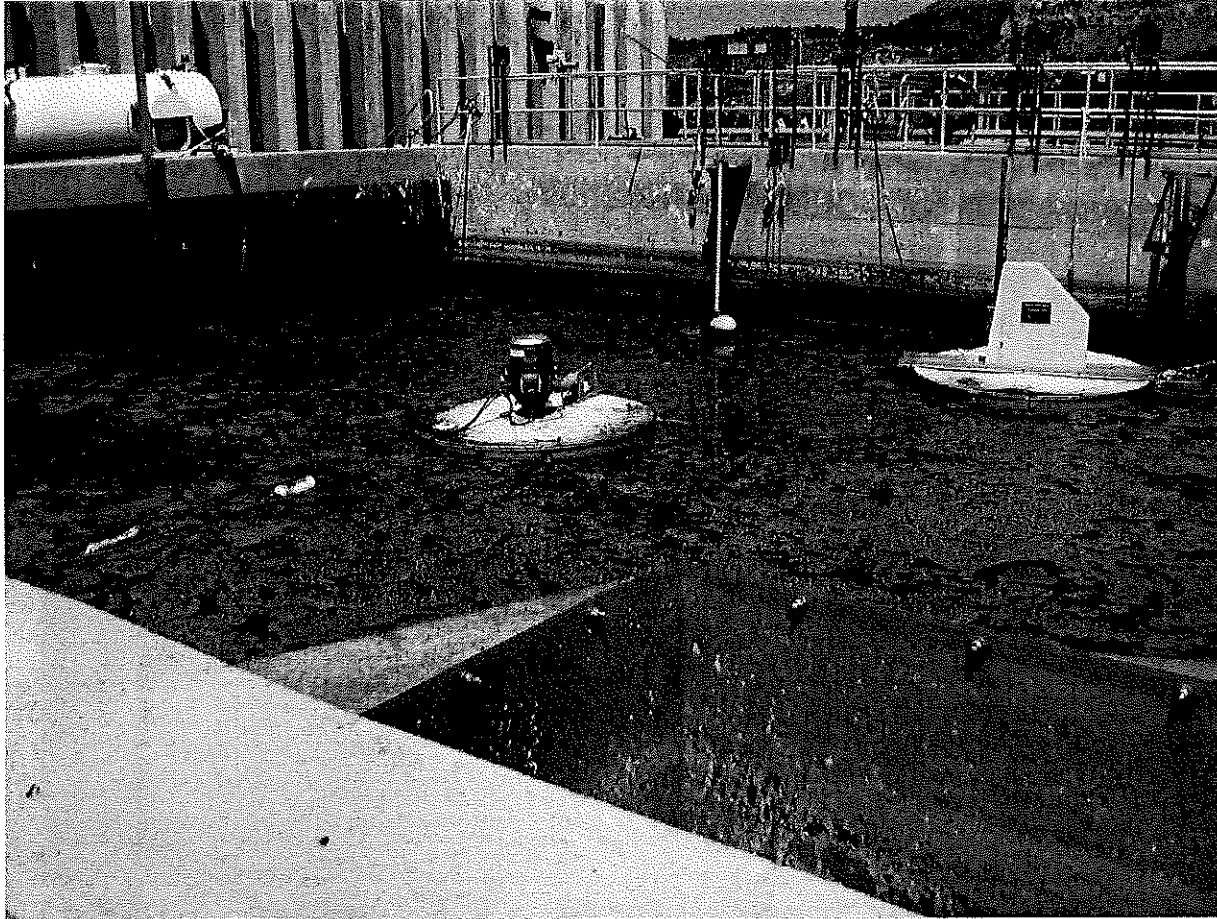


Photo File Name: P6070590

Date of Photo: 06/07/2017

Time of Photo: 11:06 a.m.

Photographer: David Long

Description: SBR #1 with pumps off

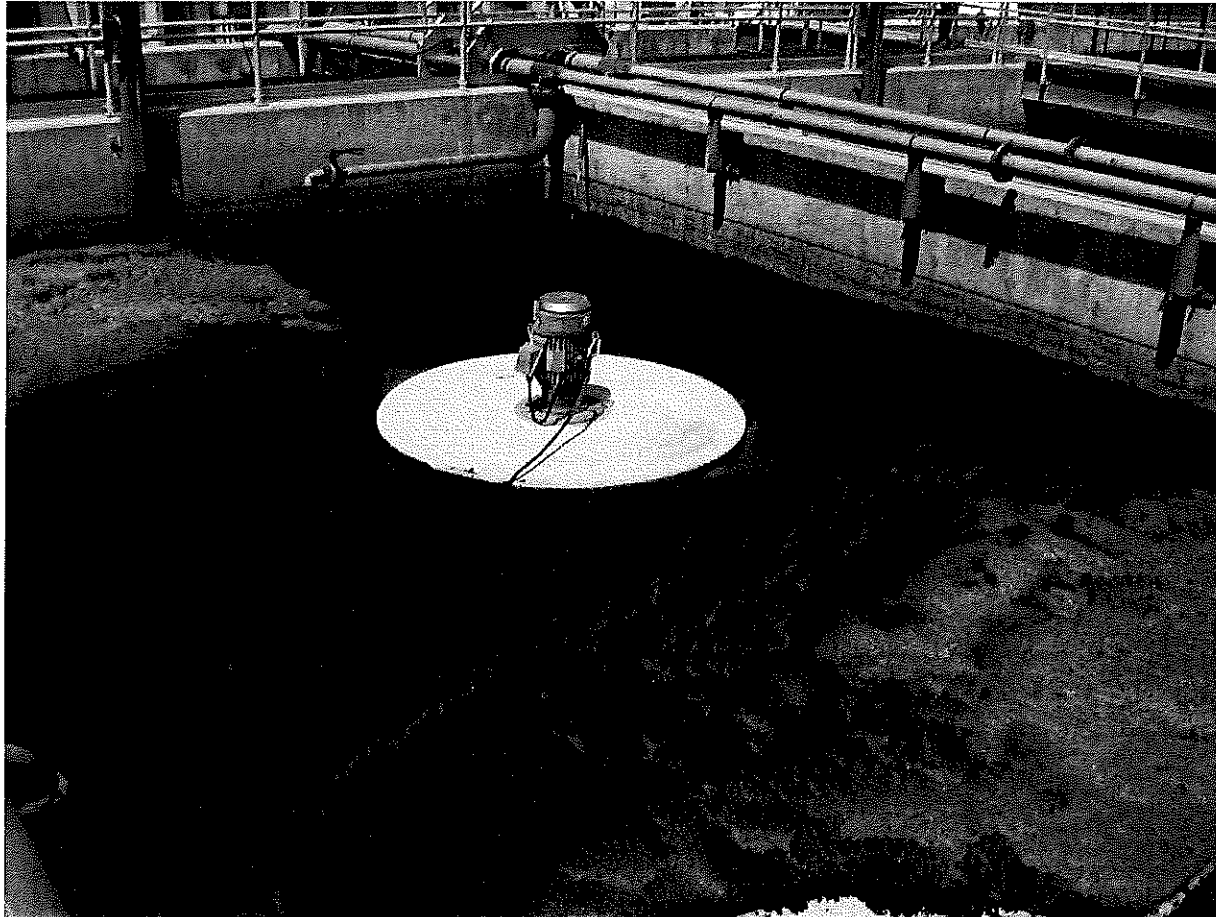


Photo File Name: P6070591

Date of Photo: 06/07/2017

Time of Photo: 11:07 a.m.

Photographer: David Long

Description: SBR #1 – Note heavy sludge buildup

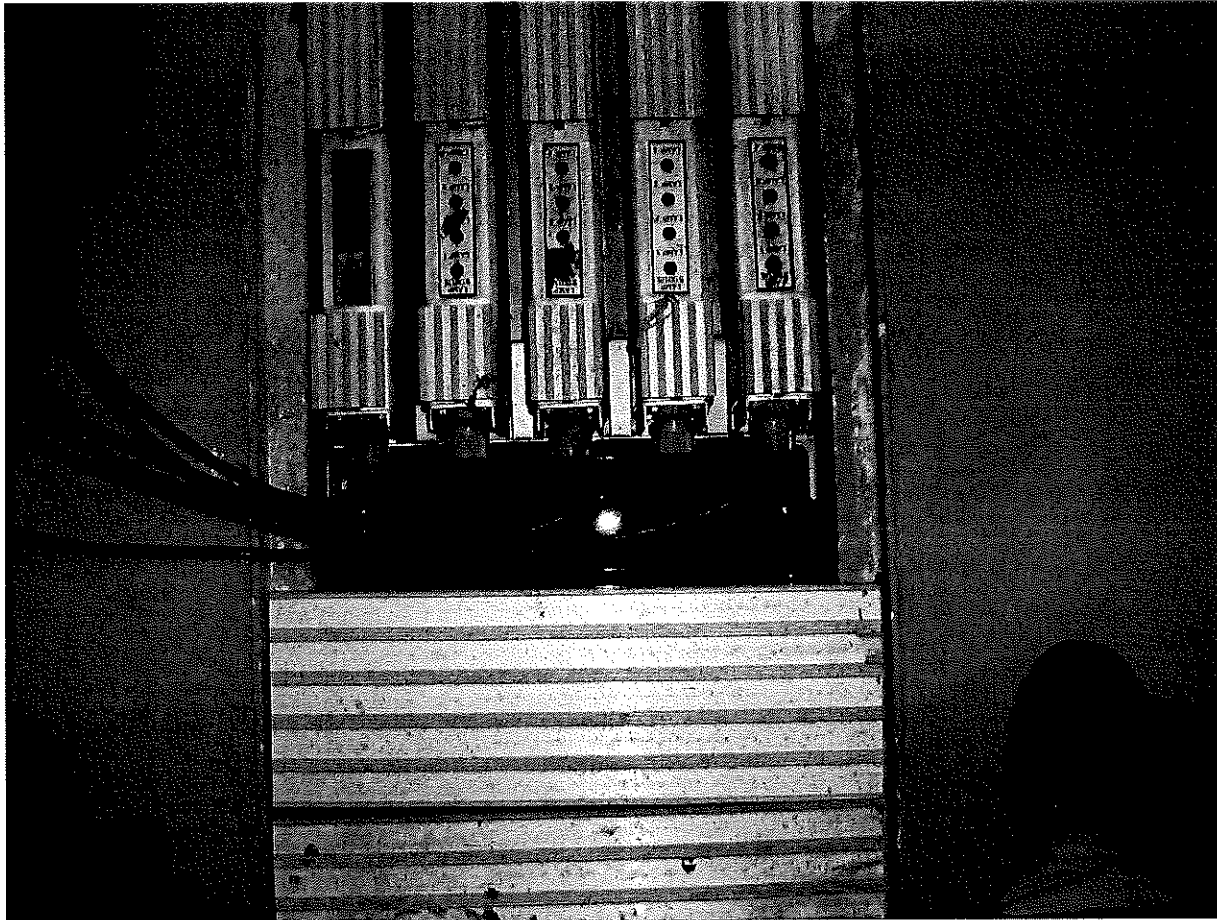


Photo File Name: P6070595

Date of Photo: 06/07/2017

Time of Photo: 11:23 a.m.

Photographer: David Long

Description: UV disinfection system not online at time of inspection

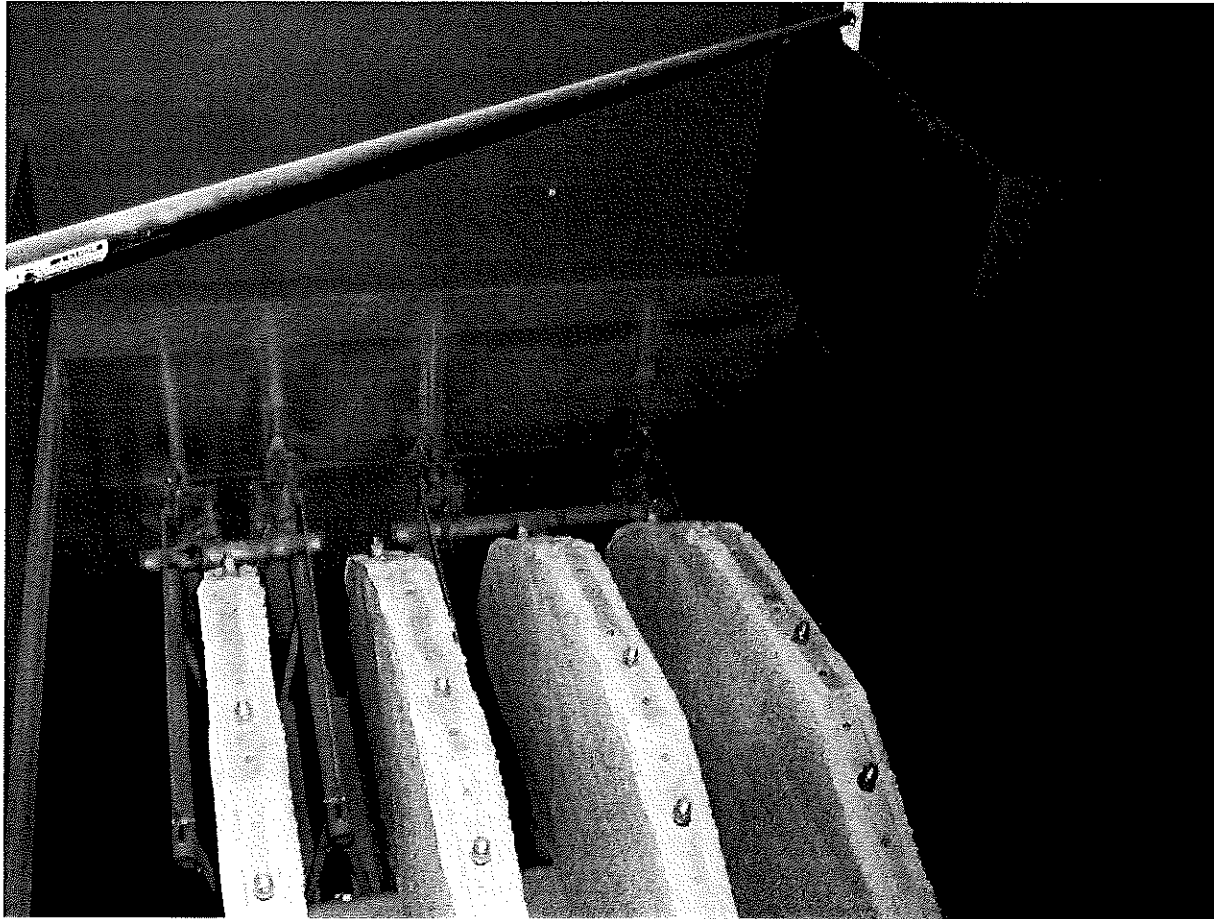


Photo File Name: P6070597

Date of Photo: 06/07/2017

Time of Photo: 11:24 a.m.

Photographer: David Long

Description: Solids filtration system prior to UV disinfection has been offline for over six months

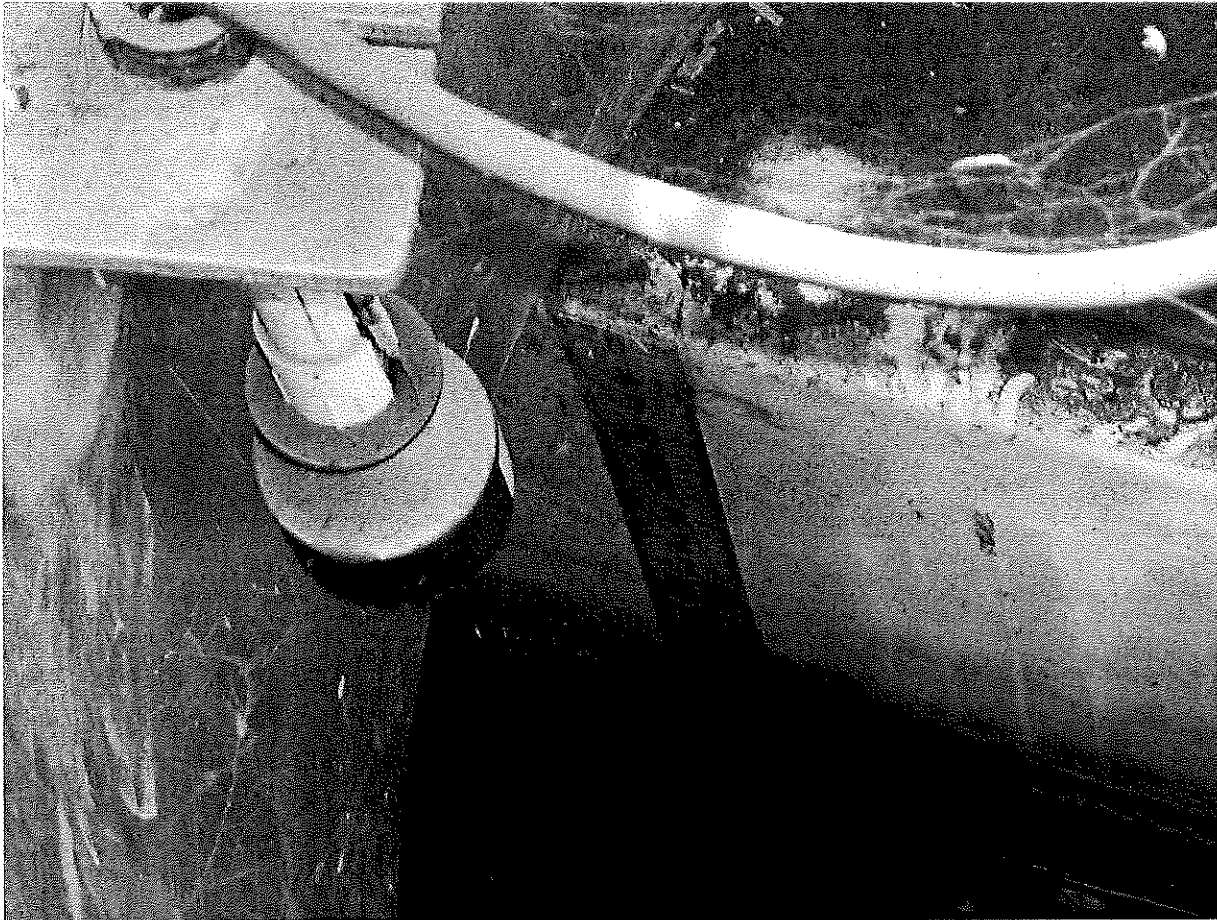


Photo File Name: P6070601

Date of Photo: 06/07/2017

Time of Photo: 11:28 a.m.

Photographer: David Long

Description: Staff gauge for facility's Parshall Flume (primary flow measurement device). Note heavy scum buildup and lack of clear reading on gauge.



Photo File Name: P6070605

Date of Photo: 06/07/2017

Time of Photo: 11:37 a.m.

Photographer: David Long

Description: Low rate of discharge to Outfall 001 due to maintenance in the SBR system at the time of inspection



Photo File Name: P6070606

Date of Photo: 06/07/2017

Time of Photo: 11:37 a.m.

Photographer: David Long

Description: Heavy sludge deposition at Outfall 001 due to lack of sludge wasting within the treatment system

