EPA United States Environmental Protection Agency

Region 6 Compliance Assurance and Enforcement Division

INSPECTION REPORT

Inspection Date(s):	April 26, 2017		
Media:	Water		
Regulatory Program(s)	CWA 308[A][B]		
Company Name:	Village of Chama		
Facility Name:	Chama Wastewater Treatment Plant		
Facility Physical Location:	0.5 Miles West of US 84/64 and NM 17		
(city, state, zip code)	Chama, New Mexico 87520		
Mailing address:	P.O. Box 794		
(city, state, zip code)	Chama, New Mexico 87520		
County/Parish:	Rio Arriba		
Facility Contact:	Levi Sandoval	Wastewater Plant Operator	
	505.929.2939		
FRS Number:	110009831174		
Identification/Permit Number:	NM0027731		
Media Number:	NA		
NAICS:	221320		
SIC:	4952		

Personnel participating in inspection:			
David Long	USEPA/6EN-WM	Environmental Scientist	214.665.7323
Amy Matthews	USEPA/6EN-WM	Environmental Engineer	214.907.0638
Ron Russom	RonR@Villageofchama.org	Mayor	575.756.2184 ext. 221

EPA Lead Inspector Signature/Date	David Long	12/04/2017
	{Inspector name}	Date
Supervisor Signature/Date	Carrie Paige Wilson	12/5/17
	{Supervisor name}	Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

A U.S. Environmental Protection Agency (USEPA) compliance evaluation inspection was performed at the Village of Chama Wastewater Treatment Plant located near the intersection US 84/64 and NM 17, Chama, New Mexico on April 26, 2017. 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 inspectors David Long and Amy Andrews at 9:00 a.m. and the inspector met with Levi Sandoval, Plant Operator who was present for the plant inspection. Following the plant inspection, the EPA inspectors were escorted to the Village of Chama City Hall where a review of the facility's laboratory and DMR data was reviewed. At the conclusion of the inspection, the EPA inspectors met with Mr. Ron Rossum, the Mayor of the Village of Chama for an exit interview. During the entry and exit briefings, the EPA inspectors provided credentials and explained the purpose of the inspection.

FACILITY DESCRIPTION

The facility is owned by the Village of Chama and operates under NPDES permit NM0027731 (effective November 1, 2011 to October 31, 2016 and has been administratively continued to date). The Village of Chama WWTP is a minor municipal discharger with a design flow of 0.3 million gallons a day (MGD) and average daily flow of 0.08 MGD. The discharge from the WWTP is to Rio Chamita and eventually to the Rio Grande River Basin. The Village of Chama 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. Operators are 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 associated with this facility currently include four lift station (all have backup generators) which feeds the influent to a grinder pump which sends influent through a three-quarter inch bar screen. From the bar screen, flow is sent to two aerated concrete lined lagoons in series (originally designed to operate in parallel, but changed to series operation to increase retention time). Effluent from the lagoons is sent to a chorine contact chamber followed by de-chlorination with sulfur dioxide. Final discharge flow rate is monitored by a Greyline OCF 4.0 flow meter. The facility also maintains a 60 degree V-Notch weir as a primary flow measurement device. Review of past DMR data showed continuous violation of their permit limits for all parameters and raises questions regarding efficacy of their treatment system or its' maintenance.

During the entry briefing, the EPA inspectors were informed by Mr. Sandoval that the Village of Chama had received an $8.2 million dollar grant from the State of New Mexico to build a treatment plant that would be operational by November 2017. The new plant would include new headworks with grit removal and improved bar screens. From the headworks, influent would be directed to a racetrack

oxidation ditch and then to a final clarifier. Effluent from the clarifiers would be sent to UV disinfection prior to discharge and solids would be routed to a sludge holding basin before processing through their sludge press and final land disposal.

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 most of this facility's treatment units, with the exception of one blower in their first lagoon was not operating. Repair of the unit was underway and was expected to be replaced by the end of that week. Otherwise, most of the remaining facility appeared to be maintained and clean. Flow to the facility's outfall was slow, however, observed effluent had a slight greenish cast with a non-persistent foam with little or no solids noted in the creek bed. The facility's discharge flow meter was lacking a calibration label and Mr. Sandoval indicated that the unit had not been calibrated since its' installation two years before. Further, Mr. Sandoval could not provide any records of periodic, in-house, calibrations having been performed.

Following the site tour, facility paperwork used to generate DMR data was reviewed at the Village of Chama administrative offices. Data from their contract laboratory (Hall Laboratories in Albuquerque, NM) to final DMRs were examined for accuracy.

Section III – AREAS OF CONCERN

At the conclusion of the inspection, the EPA inspectors met with Mr. Ron Russom, Mayor of the Village of Chama. At that time, the inspectors provided details of the inspection and reviewed issues noted in the inspection that would require additional follow-up or correction. The issues noted include:

1. While the operators of the Village of Chama WWTP appear to work diligently to maintain the equipment of the plant, the lack of compliance on their DMRs indicates that the equipment is not sufficient to produce a quality effluent that meets their permit limits. Hopefully, the new treatment plant will eliminate this issue.
2. Comparison of results between the electronic and mechanical flow measurement devices indicates that their electronic meter is reading approximately 81 percent lower than measured on the mechanical primary flow measurement device. This discrepancy also indicates that all loading calculations on their DMRs will be reported at levels 81 percent lower than actual loading rates.
3. Calculation of Total Suspended Solids (TSS) loading for the month of March 2017 indicate that their results are approximately 15 percent lower than what was reported on their DMR

The inspectors noted to Mr. Russom that even with a new treatment plant, the failure to generate a quality effluent will still not be achieved if facility personnel do not learn to properly calibrate and operate all of their new equipment. The inspectors exited the site at 12:30 p.m.

Section IV – FOLLOW UP

Facility should generate Standard Operating Procedure manuals to address their ongoing issues with facility operations and calibration schedules. Further, their methodology to calculate DMR data needs to be reviewed to insure accurate results are reported.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log

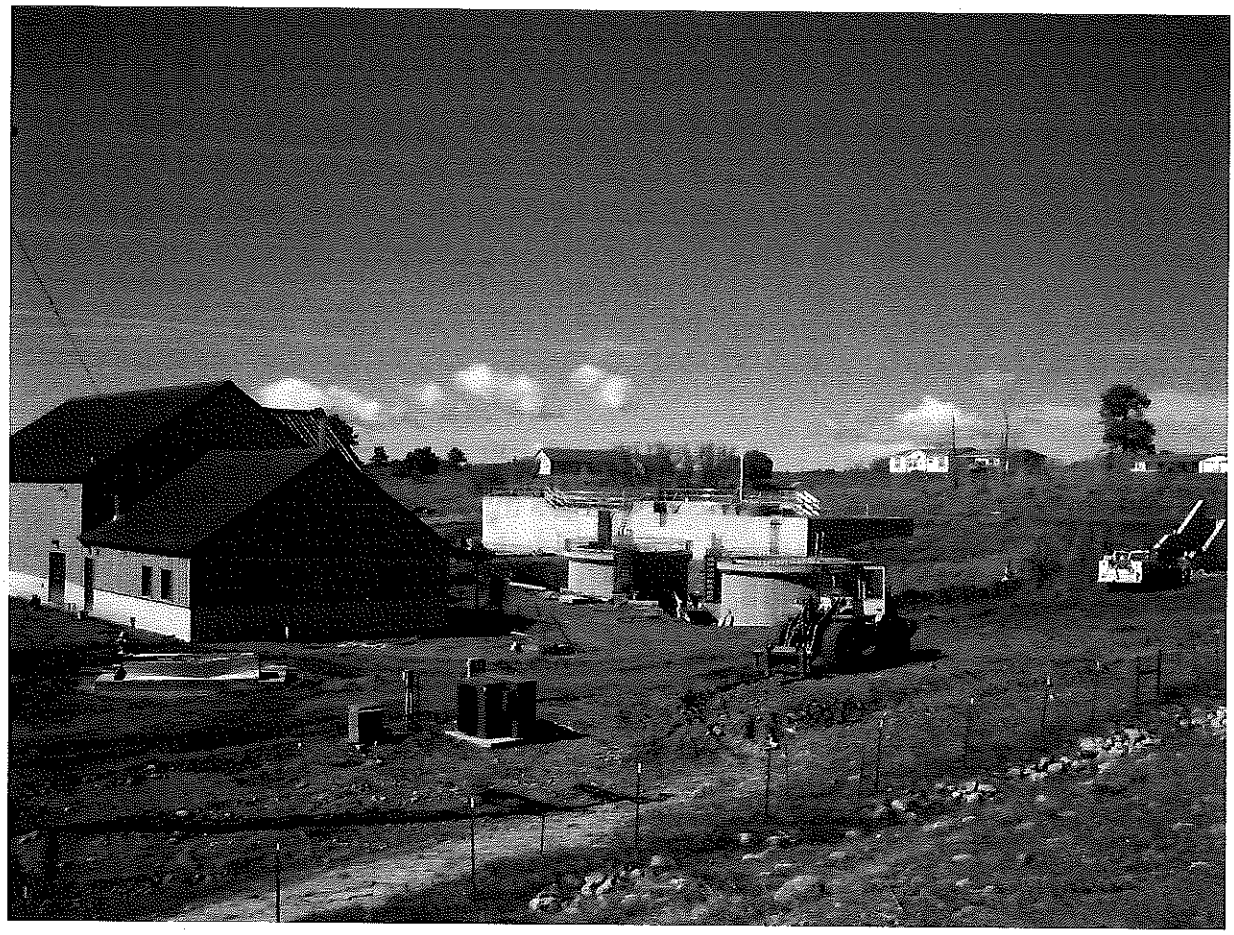

Photo File Name: P4260568

Date of Photo: 04/26/2017

Time of Photo: 11:00 a.m.

Photographer: David Long

Description: New wastewater treatment plant being built adjacent to old treatment works

Photo File Name: P4260571

Date of Photo: 04/26/2017

Time of Photo: 11:11 a.m.

Photographer: David Long

Description: Wet well/lift station to influent treatment works

Photo File Name: P4260572

Date of Photo: 04/26/2017

Time of Photo: 11:16 a.m.

Photographer: David Long

Description: Final effluent discharge from Chama Wastewater Treatment Plant