



MICHELLE LUJAN GRISHAM
Governor
HOWIE MORALES
Lt. Governor

State of New Mexico
ENVIRONMENT DEPARTMENT

Drinking Water Bureau

PO Box 5469
Santa Fe, NM 87502
Tel. 505-476-8648 • Fax 505-476-8656
www.env.nm.gov/drinking_water/



JAMES C. KENNEY
Cabinet Secretary
JENNIFER J. PRUETT
Deputy Secretary

March 19, 2019

Jack Crider
Entranosa Water and Wastewater Coop, NM3524626
1330 State Highway 333
Tijeras, NM 87059

RE: 2018 Sanitary Survey Report

Dear Jack Crider:

Enclosed is the Sanitary Survey Report for the Entranosa Water and Wastewater Coop, conducted on August 21-22, 2018 by Oneva Peña of the New Mexico Environment Department Drinking Water Bureau (DWB).

During the survey seven (7) significant deficiencies were identified and one (1) minor deficiency was provided. **Entranosa Water and Wastewater Coop corrected six (6) of the deficiencies identified during the sanitary survey inspection.** Upon receipt of this report, the Entranosa Water and Wastewater Coop must consult with the DWB within 30 days of the date of this letter for all significant deficiencies (i.e., provide written documentation to DWB within 30 days of receipt of this letter stating how and when each significant deficiency will be corrected). Failure to consult with DWB within 30 days on all significant deficiencies will result in a violation of NMAC 20.7.10.100 incorporating 40 CFR Par 141 Subpart S.

Additionally, the Entranosa Water and Wastewater Coop must take corrective action on all significant deficiencies and provide compliance documentation that is acceptable to DWB no later than 120 days of the date of this letter OR be in compliance with a DWB approved schedule and plan for correcting these deficiencies within 120 days of the date of this letter.

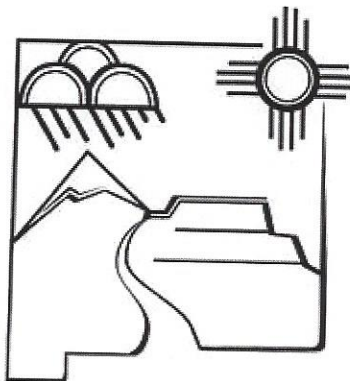
Failure to correct and provide documentation of significant deficiency corrections no later than 120 days of the date of this letter will result in a treatment technique violation of NMAC 20.7.10.100 incorporating 40 C.F.R. 141 Subpart S.

If you have any questions or need additional clarification concerning this report, please call 505-476-8648 or e-mail oneva.pena@state.nm.us.

Respectfully,

Oneva Peña, Compliance Officer
Drinking Water Bureau
Water Protection Division

cc: Electronic Central File



SANITARY SURVEY REPORT

For

Entranosa Water and Wastewater Coop NM3524626

*Este informe contiene información importante acerca de su agua potable.
Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.*

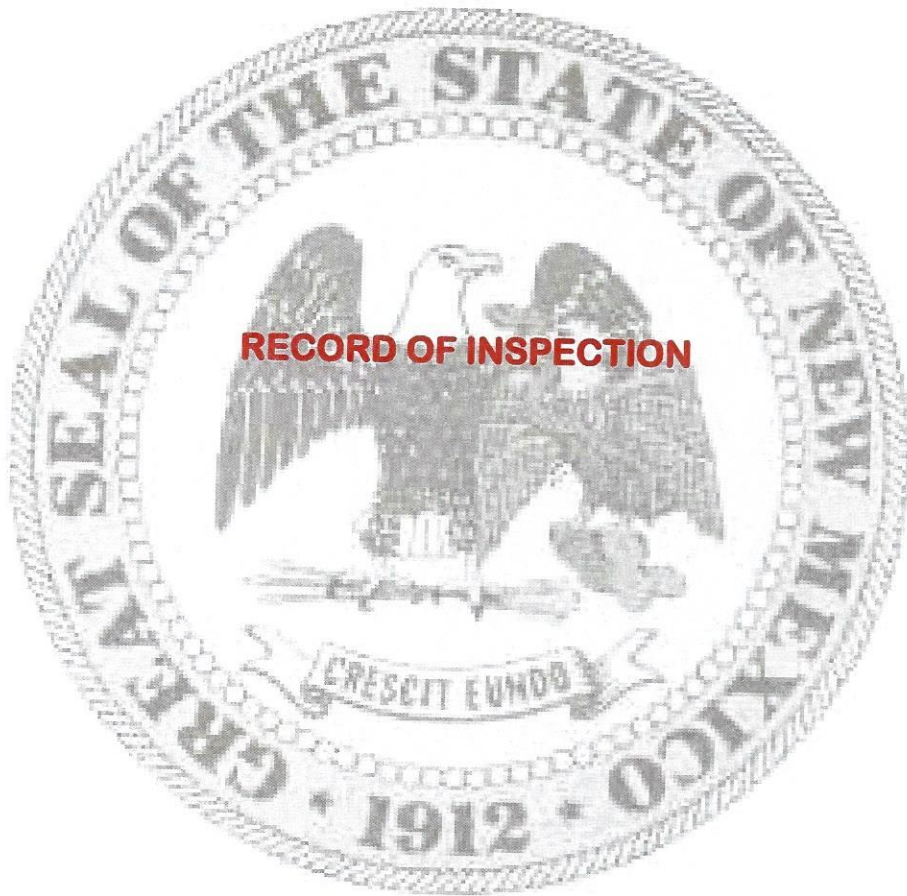
Prepared by: Oneva Peña

New Mexico Environment Department
1190 St. Francis
PO Box 5469
Santa Fe, NM 87502-5469
505.476.8620

March 19, 2019

**State of New Mexico
Environment Department
Water Protection Division
Drinking Water Bureau**

PO Box 5469
Santa Fe, NM 87502-5469



RECORD OF INSPECTION

This Sanitary Survey Report fulfills the requirements of New Mexico Administrative Code 20.7.10.100 incorporating 40 Code of Federal Regulations 141.21(d) (ii) (2) and 142.16(o)(2) for completing a State approved survey. The information and data were prepared by Oneva Peña, Compliance Officer.

NMED APPROVING AUTHORITY:

Oneva Peña, Compliance Officer

Date: March 19, 2019

Introduction

A sanitary survey enables the NMED Drinking Water Bureau Water (DWB) to provide a comprehensive and accurate review of the components of a water system, to assess the operating condition and adequacy of the water system, and to determine if past recommendations have been implemented effectively. The Sanitary Survey encompasses eight specific elements that are evaluated during the survey. Those eight elements are:

- Source (Protection, Physical Components, and Condition);
- Treatment
- Distribution System
- Finished Water Storage
- Pumps/Pump Facilities and Controls
- Monitoring/Reporting/Data Verification
- Water System Management/Operations
- Operator Compliance with State Requirements

Each element may not be specifically mentioned within this report; however, a significant deficiency or recommendation will be noted if any issues are discovered with any of these eight (8) elements.

As part of a sanitary survey the DWB conducted a site inspection of the Entranosa Water and Wastewater Coop water system. The site inspection was conducted on August 21-22, 2018 by Oneva Peña, Compliance Officer, and accompanied by Entranosa Water and Wastewater Coop water system operator, Andrew Padilla and Administrative Contact, Jack Crider. In addition to the site inspection, DWB reviewed various operational, managerial, and financial documents submitted by the Entranosa Water and Wastewater Coop water system and conducted a review of DWB compliance files for the water system.

System Description

The Entranosa Water and Wastewater Coop water system has approximately 8,210* customers and is classified as a, Community water system according to the New Mexico Drinking Water Regulations 20.7.10 NMAC. The water system consists of seven (7) wells, two (2) main booster pump stations with MIOX treatment systems, seventeen (17) storage tanks, nine (9) auxiliary booster pump stations and distribution lines.

The three (3) Horton wells (S-9, S-25, S-29) feed the Ball Tank. Raw water from the Ball Tank feeds the Nugent Pump Station/Treatment Plant. Water flowing to the Nugent Pump Station/Treatment Plant is treated by a continuously fed sodium hypochlorite solution manufactured by an on-site MIOX unit prior to feeding the Crestview Tanks #1 and #2, which in turn feed distribution. The Pine Canyon Wells (Pine Canyon #1 and #2) and the Freedom Wells (Freedom #1 and #2) feed the Frost Road Tank. Raw water stored in the Frost Road Tank flows to the Frost Pump Station/Treatment Plant to be treated with sodium hypochlorite solution manufactured by an onsite MIOX unit at the prior to being pumped to the Tierra Encantada Tank. The Tierra Encantada Tank feeds the Section 19 tank and the main portion of distribution. The production system is controlled via radio telemetry.

The main portion of the distribution system feeds ten (10) storage tanks that are plumbed to 'float' or are plumbed 'directly' to the distribution system. Two pairs of storage tanks are hydraulically equalized, essentially filling from distribution, and then supplying distribution when needed. The Paako Storage Tanks (#1 and #2) at the Paako Ridge residential development and the Steeplechase Storage Tanks (#1 and #2) are engineered to function in the same manner.

Four (4) storage tanks (Hill, Las Leyendas, Woodlands, and Magic Valley) are plumbed 'directly' to the distribution system and all feed isolated portions of distribution. The main distribution system also supplies the Saddlespur Storage Tank which is also plumbed to 'float' on the distribution system. The Saddlespur Tank feeds the Sandia Mountain Tank, which in turn supplies the Rancho Verde Tank prior to supplying an isolated portion of the distribution network.

There is an interconnection with Vista de Manana water system (NM350120) tied into the piping between the two Steeplechase tanks. Water provided to the interconnection with Vista de Manana supplies approximately 30% of the Vista de Manana summer consumption. Entranosa Water and Wastewater Coop also has a consecutive connection and provides treated water to East Mountain Water Hauling (NM3503301).

The distribution network consists of over 250 miles of piping spanning three (3) counties (Santa Fe, Bernalillo and Tarrant) and is comprised of approximately 98% PVC and 2% ductile iron pipe. The distribution system functions via 19 pressure zones and contains 3,351 metered service connections. The system operates and maintains numerous booster pumps and pressure reducing valves throughout the distribution system.

*Pursuant to 20.7.10.9 (A) NMAC, "The residential portion of the population shall be calculated by multiplying the number of service connections by the average household size in the county where the service connection is located. The most recent census conducted by the U.S. census bureau shall be the source of the average household size data." U.S. States Census Bureau indicates average persons per household in Bernalillo County (2011-2015) = 2.45. The Water System reports 3,351 service connections which equates to a population of 8,210. <https://www.census.gov/quickfacts/table/HSD310215/35033,35047,00>.

Survey Findings

Sanitary surveys serve as a proactive public health measure and can provide important information on a water system's design and operations, can identify minor and significant deficiencies for correction before they become major problems, and can improve overall system compliance. The following significant and minor deficiencies were identified during the sanitary survey.

Significant Deficiencies:

A significant deficiency is defined as any deficiency that is causing or has the potential to cause a threat to public health [New Mexico Administrative Code (NMAC) 20.7.10.100 incorporating 40 Code of Federal Regulations (CFR) §141.403(a)(4)]. Water systems must consult with DWB within 30 days and take corrective action for any significant deficiencies found during the sanitary survey no later than 120 days after receiving written notification of such deficiencies, or be in compliance with a DWB-approved schedule and plan for correcting these deficiencies within the same 120 day period [NMAC 20.7.10.100 incorporating 40 CFR §141.403(a)(4) and §141.403(a)(5)(i)-(ii)]. Failure to provide documentation to NMED of the significant deficiency correction, within 120 days of the date on this report, will result in a treatment technique violation of NMAC 20.7.10.100 incorporating 40 CFR Part 141 Subpart S.

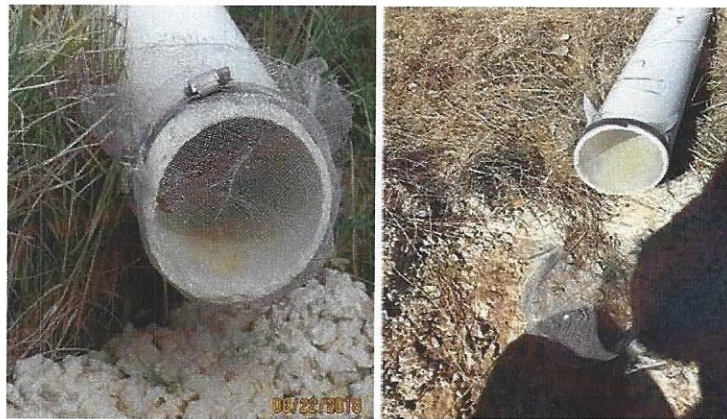
A total of seven (7) significant deficiencies were identified at the Entranosa Water and Wastewater Coop water system during the survey. Six of the seven deficiencies identified below have been corrected at the time of the report.

1. Deficiency: (001D) Screen on well blow-off pipe at Horton Well S-25 needs to be replaced

Regulatory Citation: 20.7.10.400.B NMAC

Concern/Description: Direct Contamination. Damage to appurtenances can result in the source being tampered with or damaged which can result in either contamination of the source or a water outage.

Corrective Action: Well blow-off pipe needs to be fitted with a corrosion-resistant 24 mesh screen. Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.



Corrected 2/14/2019

2. Deficiency: (001C) Pine Canyon Well #2 (South Pine), wellhead not secured from the elements

Regulatory Citation: 20.7.10.400.B NMAC

Concern/Description: Direct Contamination – Unauthorized access can result in water system being contaminated and key components being compromised which could result in a water outage.

Corrective Action: Bolts on well head are loose and wellhead needs to be sealed to prevent unauthorized entry and contamination. Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.



Corrected 2/14/2019

3. *Deficiency:*

(0010) Crestview Tank #1 overflow pipe is not 12-18" above ground level

Regulatory Citation: 20.7.10.400.D NMAC

Concern/Description: Direct Contamination; Delivery; Operations Management – Missing or inadequately sized appurtenances can result in damage and contamination of the storage facility. Inability to drain or bypass the storage facility also limits the system's ability to inspect and maintain the storage facility. If a storage facility is not inspected and maintained, it may result in potential microbial growth or a failure of the structure.

Corrective Action: NMED/DWB recommends that the overflow pipe be excavated and extended so it ends 12"-18" above ground level. Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.



Corrected 2/14/2019

4. Deficiency:

(001Q) Crestview Tank #1 has torn overflow screen.

Regulatory Citation:

20.7.10.400.D NMAC

Concern/Description:

Direct Contamination. Properly protected storage facilities prevent contaminated water, insects, vermin, or other potential contaminants from entering the facility.

Corrective Action:

Storage tank's overflow pipe screen should be replaced with a corrosion-resistant 24 mesh screen or be fitted with an acceptable flap valve. Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.



Corrected 2/14/2019

5. Deficiency:

(001O) Ball Tank has vermin hole under tank

Regulatory Citation:

20.7.10.400.D NMAC

Concern/Description:

Direct Contamination; Delivery; Operations Management – Missing or inadequately sized appurtenances can result in damage and contamination of the storage facility. Inability to drain or bypass the storage facility also limits the system's ability to inspect and maintain the

storage facility. If a storage facility is not inspected and maintained, it may result in potential microbial growth or a failure of the structure.

Corrective Action:

Submit documentation to NMED-DWB showing hole under tank has been filled. Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.



Corrected 2/14/2019

6. Deficiency:

(0010) Steeplechase Tank #1 overflow pipe is not 12-18" above ground level

Regulatory Citation:

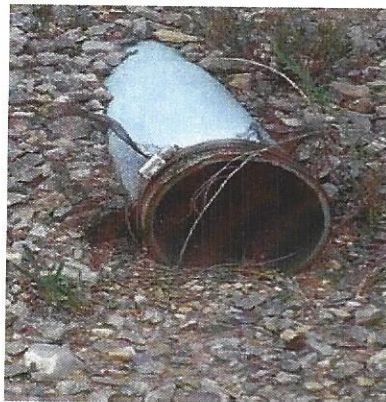
20.7.10.400.D NMAC

Concern/Description:

Direct Contamination – Missing or inadequately sized appurtenances can result in damage and contamination of the storage facility. Inability to drain or bypass the storage facility also limits the system's ability to inspect and maintain the storage facility. If a storage facility is not inspected and maintained, it may result in potential microbial growth or a failure of the structure.

Corrective Action:

NMED/DWB recommends that the overflow pipe be excavated and extended so it ends 12"-18" above ground level.

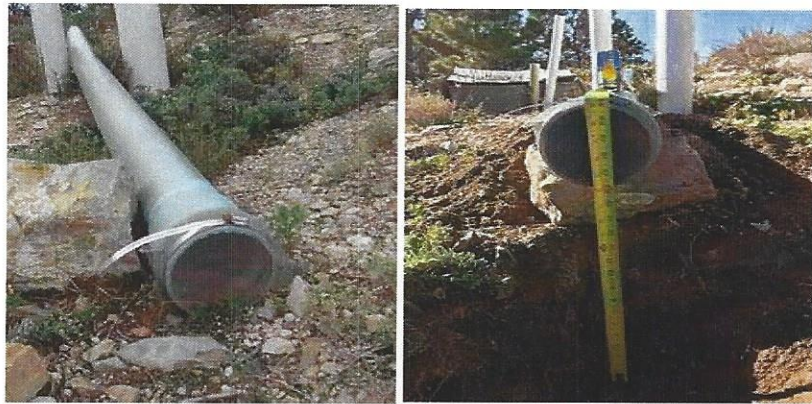


7. Deficiency: (0010) Magic Valley Tank overflow pipe is not 12-18" above ground level

Regulatory Citation: **20.7.10.400.D NMAC**

Concern/Description: Direct Contamination – Missing or inadequately sized appurtenances can result in damage and contamination of the storage facility. Inability to drain or bypass the storage facility also limits the system's ability to inspect and maintain the storage facility. If a storage facility is not inspected and maintained, it may result in potential microbial growth or a failure of the structure.

Corrective Action: NMED/DWB recommends that the overflow pipe be excavated and extended so it ends 12"-18" above ground level. **Entranosa Water and Wastewater Coop corrected deficiency on 2/14/2019.**



Corrected 2/14/2019

Minor Deficiencies:

The following are minor deficiencies which DWB recommends be corrected before the next sanitary survey to ensure the deficiencies do not become significant.

1. Deficiency: Poor housekeeping of Rancho Verde Tank foundation

Recommendation: It is recommended that the water system remove brush and weeds from around storage tank.



Conclusion

The sanitary survey for the Entranosa Water and Wastewater Coop water system was completed on August 21-22, 2018. Based upon the onsite inspection and review of various operational and managerial documents and of DWB compliance files, seven (7) significant deficiencies were identified and one (1) minor deficiencies were identified. The Entranosa Water and Wastewater Coop water system must comply with the following bullets in the correction of these deficiencies.

- Upon receipt of this report, the Entranosa Water and Wastewater Coop water system must consult with the DWB within 30 days for all significant deficiencies (i.e., provide written documentation to DWB within 30 days of receipt of this report stating how and when each significant deficiency will be addressed).
- Failure to consult with DWB within 30 days on all significant deficiencies will result in a monitoring and reporting violation of NMAC 20.7.10.100 incorporating 40 CFR Part 141 Subpart S.
- The Entranosa Water and Wastewater Coop water system must take corrective action on all significant deficiencies and provide compliance documentation that is acceptable to DWB no later than 120 days after receiving written notification of such deficiencies OR be in compliance with a DWB approved schedule and plan for correcting these deficiencies within 120 days.
- Failure to correct any significant deficiency in accordance with the previous bullet will result in a treatment technique violation of NMAC 20.7.10.100 incorporating 40 CFR Part 141 Subpart S.
- In addition, the Entranosa Water and Wastewater Coop must provide written documentation to the DWB within 30 days of completing corrective action for each significant deficiency. Failure to submit documentation within 30 days will result in a monitoring and reporting violation of NMAC 20.7.10.100 incorporating 40 CFR Part 141 Subpart S.

If you have any questions or need additional clarification concerning this report, please call 505-476-8648 or e-mail oneva.pena@state.nm.us.



NMED - Drinking Water Bureau
System Schematic
Entanosa Water & Wastewater Coop
NM3524626

