NMED
New Mexico Environment Department

SANITARY SURVEY REPORT

For

Cuba Water System
NM3509023

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: Gordon Miller– Compliance Officer
New Mexico Environment Department
1800 E. 30th Street, Suite B
Farmington, NM 87401

State of New Mexico
Environment Department
Water Protection Division
Drinking Water Bureau
1800 E. 30th Street, Suite B
Farmington, NM 87401

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.

Compliance Officer Signature: Gordon Miller Digitally signed by Gordon Miller Date: 2024.09.20 08:35:56 -06'00' Date: 9/20/24

Gordon Miller, Compliance Officer

INTRODUCTION

A sanitary survey enables the New Mexico Environment Department Drinking Water Bureau (NMED DWB) to provide a comprehensive 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 area of concern will be noted if any issues are discovered with any of these eight (8) elements.

The Administrative Contact for the Cuba Water System was given prior notification of the sanitary survey. The preliminary sanitary survey letter provided a list of required records which would be reviewed as part of the sanitary survey as well as a checklist for preparing for the sanitary survey. The letter requested that specific records be provided to the Compliance Officer prior to the sanitary survey.

The sanitary survey was conducted by Gordon Miller Compliance Officer and Wayne Jeffs Northern Compliance Supervisor of the NMED DWB on August 21, 2024. Also, in attendance was Administrative Contact Esther Herrera, Mayor Denny Herrera, system operator Angelo Aragon, New Mexico Rural Water Association utility operator Mark Cordova, system staff member Dominic Martinez, and in attendance via telephone consultant Jeanette Linville.

BACKGROUND

The previous sanitary survey at Cuba Water System was conducted on June 30, 2021, by James Jones. During the previous sanitary survey, nine (9) significant deficiencies were cited. NMED DWB was not provided documentation that the following two (2) deficiencies were corrected:

- 006P – Pressures too low in distribution
    - The Cuba Water System was issued a notice of violation for failing to correct this significant deficiency on December 10, 2021. As of the day of the 2024 sanitary survey, pressures in distribution were measured at 20 psi in the affected area and this significant deficiency has not been resolved.

- 001M – Storage facility corrosion, Storage Tank #2 (#09023006)
    - The Cuba Water System was issued a notice of violation for failing to correct this significant deficiency on December 10, 2021. This significant deficiency was also included in the August 21, 2018, sanitary survey report and is unresolved. As of the day of the 2024 sanitary survey, the water system has not completed any corrective action to resolve this significant deficiency, and the facility has not been inspected since 2017. However, funding has been secured for the design and construction of a replacement facility and design is currently under way.

An Administrative Compliance Order was issued on January 24, 2022, requiring that all unresolved significant deficiencies from the August 21, 2018, and August 4, 2021, sanitary survey reports be corrected by March 30, 2022, and that Consumer Confidence Reports for 2019 and 2020 be provided to consumers and the state by February 28, 2022. As of the day of the 2024 sanitary survey, the significant deficiencies listed above from the 2018 and 2021 sanitary surveys have not been corrected.

SYSTEM DESCRIPTION

The Cuba Water System is a ground water system with an approximate population of 1789 with 660 total service connections. The population for the Cuba Water System was calculated in accordance with 20.7.10.9.A NMAC. The Cuba Water System is classified as a community water system according to the New Mexico Drinking Water Regulations 20.7.10 NMAC. The water system consists of three (3) wells, one (1) treatment plant, two (2) booster pump stations, two (2) storage facilities, and distribution.

The Cuba Water System draws water from three (3) wells. Well #1 (#09023001) is equipped with a twenty (20) horsepower submersible pump that produces water a rate of approximately seventy (70) gallons per minute (GPM). Well #2 (#09023002) is equipped with a thirty (30) horsepower submersible pump that produces water at a rate of approximately eighty-five (85) GPM. Well #3 (#09023003) was constructed in 2022 and is equipped with a forty (40) horsepower submersible pump that produces water at a rate of approximately one hundred twenty (120) GPM. Flow meters at each well provide data to the Supervisory Control and Data Acquisition (SCADA) system located in Treatment Plant #1 (#09023004). A totalizer in the SCADA system tracks total water production from the wells, however, the totalizer resets once it reaches 60,000 gallons making tracking water usage difficult. Water from Well #1 (#09023001), Well #2 (#09023002), and Well #3 (#09023003) combines before flowing into Treatment Plant #1 (#09023004). There are no individual raw water sample points for each well and the first available tap for sampling is in Treatment Plant #1 (#09023004) after water from the wells has combined. A filling station equipped with a RPZ backflow preventor is located in the well field and provides untreated water free of charge.

Treatment Plant #1 (#09023004) provides organics removal by aeration, iron and manganese removal by greensand filtration and disinfection. Raw water from all three (3) wells combines and flows into Treatment Plant #1 (#09023004) where it is injected with a potassium permanganate solution before flowing to the aerator located above the greensand filter. The potassium permanganate solution is mixed and stored in day tanks located at the head of the treatment plant. At the time of the sanitary survey the aerator fan was not operational, and no aeration was being provided. From the aerator water flows by gravity to the greensand filter where iron and manganese are removed. The filter is manually backwashed approximately once each day using raw well water based on flow rate of filter effluent. Backwash water flows to a collection pond located in the Santa Fe National Forest south of Treatment Plant #1 (#09023004). Filter media consists of anthracite coal and is due for

replacement within the next year. The system operator expects the filter to be out of service for approximately one (1) to one- and one-half (1.5) months to complete media replacement.

Filtered water is injected with a calcium hypochlorite solution (Induchlor) for disinfection as it flows from the greensand filter to the 16,000-gallon clearwell. The calcium hypochlorite solution is mixed and stored in a day tank located in a separate room from all other treatment processes. Low- and high-level sensors in the clearwell send signals to the SCADA system that controls the well pumps. At the time of the sanitary survey the high-level sensor in the clearwell was not functioning properly causing regular overflow of the clearwell onto the treatment plant floor. Finished water flows from the clearwell to Storage Tank #1 (#09023005) by gravity. The transmission line that carries water from Treatment Plant #1 (#09023004) to Storage Tank #1 (#09023005) is believed to have sediment build-up in some areas contributing to the regular overflow of the clearwell.

Storage Tank #1 (#09023005) is a thirty-two (32) foot tall, 425,000-gallon welded steel ground tank with an external overflow and drain that combine to one line equipped with a proper #24 mesh corrosion resistant screen at the discharge. Water from Storage Tank #1 (#09023005) flows by gravity to the main pressure zone in distribution. The Main Booster Station (#09023007) utilizes two (2) three (3) horsepower vertical shaft centrifugal pumps to move water to the second pressure zone in distribution. The second pressure zone is served by Storage Tank #2 (#09024006) that floats on distribution. Storage Tank #2 (#09023006) is a forty (40) foot tall, 500,000-gallon welded steel ground tank with an external overflow and drain that combine to one line equipped with a proper #24 mesh corrosion resistant screen at the discharge. Nacimiento Road Booster Station (#09023008) utilizes one (1) one (1) horsepower centrifugal pump controlled by a variable frequency drive (VFD) to provide additional pressure to the service connections located on Nacimiento Road. This area has historically had low pressure because of undersized distribution piping. A spare pump is kept at the Village offices for the Nacimiento Road Booster Station (#09023008).

Distribution consists of approximately thirty-five (35) miles of pipe in diameters ranging from one and one quarter (1.25) to twelve (12) inches. Distribution piping material is mostly polyvinyl chloride (PVC), with some Asbestos Cement (AC), ductile iron, and cast iron. Not all service connections are equipped with meters. Connections that have meters are equipped with mechanical meters that must be read manually. The Cuba Water System is not currently reading meters, and a flat fee is charged for water service. The system plans to upgrade all service connections to radio read meters before the end of 2024. The system operator estimates that approximately twenty (20) percent of service connections are equipped with cross-connection control devices. Approximately forty-seven (47) hydrants exist throughout distribution and flushing is conducted on an as-needed basis to maintain water quality. Valves have been located and are included in the system maps and asset management plan. Valves are exercised occasionally, but not on a regular schedule.

The Cuba Water System has recently started reporting water usage to the New Mexico Office of the State Engineer and has begun paying into the Water Conservation Fund as required. Spare parts are kept on hand for distribution repairs along with a spare pump for each booster station. No emergency fund exists at this time as Village funds for the water system have been used responding to a variety of issues recently.

FIELD ANALYSIS

During the sanitary survey the following field analysis were conducted, and the results are shown below:

- ☐ Pressure - 20 psi measured at 129 Nacimiento Road.
- ☐ Total Source Production - 275 Gallons Per Minute total from all three (3) wells.
- ☐ Chlorine Residual – 0.14 mg/L free chlorine measured at 129 Nacimiento Road.

☐ Turbidity – not measured.

SANITARY SURVEY FINDINGS & CORRECTIVE ACTIONS

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.

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) or § 141.723(b)]. Public Water Systems are required to take corrective action for all significant deficiencies found during the sanitary survey. Corrective actions taken by the public water system must be acceptable to the DWB.

Fifteen (15) significant deficiencies were identified at the Cuba Water System during the sanitary survey. Those significant deficiencies are noted in the attached Significant Deficiency Summary page.

Corrective Action Plans and Corrective Action:

The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date and take corrective action for any significant deficiencies found during the sanitary survey no later than 120 days after the sanitary survey cover letter date, or be in compliance with a DWB-approved schedule and plan for correcting these deficiencies [NMAC 20.7.10.100 incorporating 40 CFR §141.403(a)(4) and §141.403(a)(5)(i)-(ii)].

The Cuba Water System will be held to the above due dates unless an alternate schedule is requested as part of the Corrective Action Plan.

CONCLUSION

The sanitary survey site visit for the Cuba Water System was completed on August 21, 2024.

Failure to submit a Corrective Action Plan or take corrective action for any significant deficiencies identified during the sanitary survey and noted in the attached Significant Deficiency Summary page will result in treatment technique violations as per [NMAC 20.7.10.100 incorporating 40 CFR Part 141 Subpart S] for ground water systems.

If you have any questions or need additional clarification concerning this report, please contact me at 505-258-3203 or by e-mail at gordon.miller@env.nm.gov.

Significant Deficiency Summary

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) or § 141.723(b)].

1. **Significant Deficiency Code:** 001L – Wellhead not properly sealed.

   Regulatory Citation: 20.7.10.400.C NMAC

   Significant Deficiency Description: On the day of the sanitary survey, it was observed that the sanitary well seal on Well #1 (#09023001) was missing a gasket and multiple bolts were loose or missing. Improperly sealed wellheads can allow non-potable water, insects, or other contaminants to enter the well and aquifer.

   Photographic Documentation:

   Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

   Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the sanitary well seal at Well #1 (#09023001) includes a gasket in its configuration and all bolts are present and tight.

2. **Significant Deficiency Code:** 002O – Cross-connection present at source facility.

   Regulatory Citation: 20.7.10.400.P NMAC

   Significant Deficiency Description: On the day of the sanitary survey, a leak was observed in the discharge line of Well #2 (#09023002). Water was observed to be bubbling up at the ground surface directly downstream of the isolation valve and production meter of Well #2 (#09023002) and the enclosures for the valve and meter were full of water.

Photographic Documentation:

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit photographs or other documentation acceptable to DWB, indicating that the leak in the discharge line of Well #2 (#09023002) has been repaired and that the enclosures for the isolation valve and production meter are no longer full of water.

3. **Significant Deficiency Code:** 001K – Inadequate surface construction at source facility.

Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.403(a)(4)

Significant Deficiency Description: On the day of the sanitary survey, it was observed that the concrete pad surrounding the casing of Well #1 (#09023001) was badly cracked. Cracked concrete well pads allow non-potable water or other contaminants to enter the aquifer.

Photographic Documentation:

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

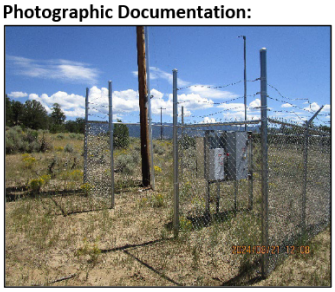
Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the cracks in the concrete pad surrounding Well #1 (#09023001) have been properly sealed or that the concrete pad has been replaced.

4. **Significant Deficiency Code:** 001J – Inadequate site security at source facility.

   Regulatory Citation: 20.7.10.400.B NMAC

   Significant Deficiency Description: On the day of the sanitary survey, the security fence surrounding the electrical controls for Well #2 (#09023002) was observed to be missing a gate. Unauthorized access could result in key components being compromised leading to water outage.

   Photographic Documentation:



   Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

   Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that adequate site security has been installed at the electrical controls for Well #2 (#09023002).

5. **Significant Deficiency Code:** 002T – Cross-connections present in treatment facility.

   Regulatory Citation: 20.7.10.400.P NMAC

   Significant Deficiency Description:

   a) On the day of the sanitary survey, three (3) hoses no longer in use were observed running from the clearwell at Treatment Plant #1 (#09023004) and dead ending in the rafters of the plant building. The unused hoses pose a risk of allowing contamination into the clearwell and water distribution system.

   b) On the day of the sanitary survey, a hose connected to the filter effluent line at Treatment Plant #1 (#09023004) was observed to be submerged in a bucket being used to visually monitor the potassium permanganate dosage. The submerged hose presents a risk of allowing contamination into the filter effluent water.

Photographic Documentation:

a(1). 

a(2). 

b. 

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit photographs or other documentation acceptable to DWB, indicating that:

a) The three (3) hoses running from the clearwell dead ending in the Treatment Plant #1 (#09023004) rafters have been removed and the penetrations into the clearwell have been properly sealed.

b) The cross-connection created by the submerged hose from the filter effluent line discharging into the bucket in Treatment Plant #1 (#09023004) has been eliminated by creating a sufficient air gap or installing a backflow prevention device on the discharge line.

6. **Significant Deficiency Code:** 004A – Inadequate replacement equipment for critical processes at treatment facility.

Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.403(a)(4)

Significant Deficiency Description: On the day of the sanitary survey, it was observed that the blower for the aerator at Treatment Plant #1 (#09023004) was not operational. Aeration is critical to the treatment process at Cuba Water System and reduces the levels of organic contaminants in the water.

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the blower for the aerator at Treatment Plant #1 (#09023004) has been repaired or replaced and is operational.

7. **Significant Deficiency Code:** 005A – Inadequate controls at treatment facility.

   Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.403(a)(4)

   Significant Deficiency Description: On the day of the sanitary survey, it was observed that the high-level switch in the clearwell at Treatment Plant #1 (#09023004) was not operational. The high-level switch is used to stop water production when the clearwell is at maximum capacity. The lack of an operational high-level switch frequently causes the clearwell to overflow through the hatch in the floor of Treatment Plant #1 leading to potential contamination of finished water and a variety of hazards in the treatment facility.

   Photographic Documentation:

   Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

   Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the high-level switch for the clearwell at Treatment Plant #1 (#09023004) is operational and that the clearwell no longer overflows.

8. **Significant Deficiency Code:** 004P – Chemicals improperly stored.

   Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.403(a)(4)

   Significant Deficiency Description: On the day of the sanitary survey, the lid of the calcium hypochlorite solution day tank at Treatment Plant #1 (#09023004) was observed to have a large opening that could allow insects, vermin, or other contaminants into the tank.

Photographic Documentation:

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the opening in the lid of the calcium hypochlorite solution day tank at Treatment Plant #1 (#09023004) has been sealed.

9-10. Significant Deficiency Code: 001E – Poor housekeeping of system facilities.

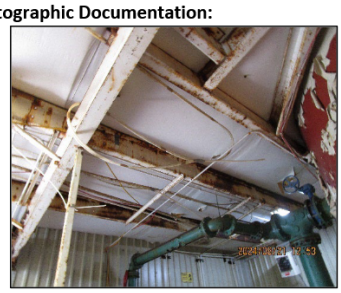
Regulatory Citation: 20.7.10.400.B NMAC

Significant Deficiency Description:
9. On the day of the sanitary survey, it was observed that the overall condition of the building, equipment, and controls at Treatment Plant #1 (#09023004) is greatly in need of maintenance. Excessive humidity within the building has led to corrosion of most exposed metal surfaces, peeling paint on the exterior of the filter, and corrosion of the electrical control panels used to operate plant equipment. Water used for process control monitoring is flowing directly onto the floor contributing to the excessive humidity in the building. The poor housekeeping at Treatment Plant #1 (#09023004) presents potential for workplace hazards for water system staff, equipment failure, and water outage.

10. On the day of the sanitary survey, it was observed that the Main Booster Station (#09023007) and surrounding security fence was damaged and poorly repaired. The booster station building had several open penetrations that could allow insects and vermin to enter the structure. An old wooden sign was used to patch the building after a vehicle collision. The building also lacks proper insulation to prevent pipes from freezing during the winter.

Photographic Documentation:

9(a)



9(b)

9(c)

9(d)

10(a)

10(b)

10(c)

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit photographs or other documentation acceptable to DWB, indicating that:
9) Proper ventilation has been installed to reduce humidity within the plant building, that peeling paint on the filter has been removed and repaired or repainted, that process control monitoring water is routed to the drain rather than spilling onto the floor, and that areas with exposed corroded metal have been painted, coated, or repaired to prevent further corrosion.

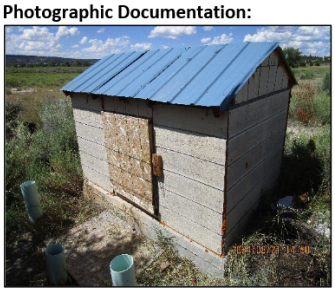
10) The open penetrations in the Main Booster Station (#09023007) building have been properly repaired to prevent the entry of insects and vermin and that the building is properly insulated to prevent pipes from freezing in the winter. Additionally, the security fence surrounding the Main Booster Station (#09023007) must be repaired.

11. **Significant Deficiency Code:** 001P – Failure to properly secure pump station from unauthorized entry.

Regulatory Citation: 20.7.10.400.B NMAC

Significant Deficiency Description: On the day of the sanitary survey, the Nacimiento Road Booster Station (#09023008) building was observed to have no security in the form of either a fence or locking door.

Photographic Documentation:



Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

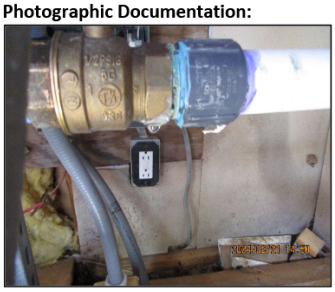
Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the Nacimiento Road Booster Station (#09023008) has been equipped with a locking door or security fence to prevent unauthorized entry.

12. **Significant Deficiency Code:** 002P – Cross-connection present at pump facility.

    Regulatory Citation: 20.7.10.400.P NMAC

    Significant Deficiency Description: On the day of the sanitary survey, it was observed that piping on both the suction and discharge sides of the pump in the Nacimiento Road Booster Station (#09023008) building were leaking. Dripping water was observed at both locations and staining or mineral deposits can be seen where this leakage has been ongoing for some time. These leaks could also be contributing to the low pressures experienced downstream of the pump station.

    Photographic Documentation:



    Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

    Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the leaks on the suction and discharge side of the pump in Nacimiento Road Booster Station (#09023008) have been properly repaired.

13. **Significant Deficiency Code:** 006M – No recent storage tank inspection.

    Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.63(e)(3)

    Significant Deficiency Description: Storage Tank #2 (#09023006) has not been inspected since 2017. This facility was listed as significantly corroded in the most recent inspection report.

Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

Required Corrective Action: The Cuba Water System must submit documentation acceptable to DWB, indicating that Storage Tank #2 (#09023006) has been inspected.

14. **Significant Deficiency Code:** 002U – Failure to have an appropriately certified operator.

    Regulatory Citation: 20.7.10.400.Q NMAC

    Significant Deficiency Description: Because of the treatment processes employed and population served by the Cuba Water System, the system is required to have a Level Three (3) Water Supply (WS3) certified operator. The Cuba Water System operator is certified as a Level Two (2) Water Supply (WS2).

    Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

    Required Corrective Action: The Cuba Water System must submit a photograph or other documentation acceptable to DWB, indicating that the services of an appropriately certified operator have been obtained.

15. **Significant Deficiency Code:** 005H – System management policies adversely affecting operations.

    Regulatory Citation: 20.7.10.100 NMAC incorporating 40 CFR 141.403(a)(4)

    Significant Deficiency Description: The Cuba Water System is critically underfunded and unable to support routine water system operations or make needed repairs in a timely manner. The system does not meter water usage at service connections and bills a flat rate for customers. Additionally, the system provides water at two filling stations unmetered and free of charge; one (1) raw well water, and one (1) treated water. Neither of the filling stations have proper security or any way to prevent abuse. Low pressures in distribution continue and an Emergency Declaration has been made by Sandoval County in attempt to find funding to replace inadequate infrastructure. Many of the ongoing issues in the Cuba Water System have been present for years and unresolved significant deficiencies exist going back to the 2018 sanitary survey.

    Required Corrective Action Plan: The Cuba Water System must submit a written Corrective Action Plan to DWB within 30 days of the sanitary survey cover letter date.

    Required Corrective Action: The Cuba Water System must submit photographs or documentation acceptable to DWB, indicating that both filling stations are secure, metered, and no longer provide water free of charge and that service connections in the system are equipped with functioning meters and customers are being billed an appropriate rate based on water usage.

Notes and Recommendations Summary

Notes and Recommendations are defined as any issue which in the estimation of the DWB, is not currently significant enough to be considered as a Significant Deficiency, however, the issue should be further investigated or addressed by the water system so as to not negatively contribute to the poor operations, management, or adequacy of the water system. Recommendations may be escalated to significant deficiencies if they are not addressed before the next sanitary survey.

The following Notes & Recommendations were identified at the Cuba Water System during the survey.

1. **Notes & Recommendations:** The Cuba Water System uses three (3) wells to supply source water. The well field surrounding the in-service wells also contains approximately eight (8) improperly abandoned wells. Some of the improperly abandoned wells have had steel caps welded to the tops of the casings and others have had no remediation. All wells that have not been properly abandoned and sealed according to New Mexico Office of the State Engineer specifications pose the risk of allowing contamination into the aquifer and jeopardizing the main source of water for the Cuba Water System.

   Photographic Documentation:




   Recommended Action: The Cuba Water System should properly abandon and seal all out of service wells in the well field surrounding the in-service wells according to New Mexico Office of the State Engineer specifications to prevent contamination of the aquifer.

2. **Notes & Recommendations:** Only one raw water sample tap exists where combined water from the wells enters Treatment Plant #1 (#09023004). The wells can be isolated and water from each well can be sampled through the existing sample tap, but this configuration is not ideal. Each individual well should be equipped with a sample tap specific to that well so that a triggered source sample can be taken easily in the event of a present result for a Total Coliform sample.

   Recommended Action: The Cuba Water System should install raw water sample taps specific to Well #1 (#09023001), Well #2 (#09023002), and Well #3 (#09023003).

Sanitary Survey Corrective Action Plan (CAP)

Ground water systems must submit a CAP within 30 days of issuance of the sanitary survey report.

PWSS Name	Cuba Water System
PWSS ID	NM3509023
Sanitary Survey Date:	August 21, 2024
Date report was issued:	September 20, 2024

Deficiency Listing– Shaded Section is to be filled out by water system representative

Deficiency Code	Description	Choose one and fill in date:	
		Date Deficiency was addressed	Expected date of completion
001L	Wellhead not properly sealed, Well #1 (#09023001)		
002O	Cross-connection present at source, Well #2 (#09023002)		
001K	Inadequate surface construction at source, Well #1 (#09023001)		
001J	Inadequate site security at source, Well #2 electrical controls (#09023002)		
002T	Cross-connections present at treatment facility, Treatment Plant #1 (#09023004)		
004A	Inadequate replacement equipment for critical process (aeration), Treatment Plant #1 (#09023004)		
005A	Inadequate controls at treatment facility, Treatment Plant #1 (#09023004)		
004P	Chemicals improperly stored, calcium hypochlorite, Treatment Plant #1 (#09023004)		
001E	Poor housekeeping, Treatment Plant #1 (#09023004)		
001E	Poor housekeeping, Main Booster Station (#09023007)		
001P	Failure to properly secure pump station from unauthorized entry, Nacimiento Road Booster Station (#09023008)		
002P	Cross-connection present at pump station, Nacimiento Road Booster Station (#09023008)		
006M	No storage tank inspection, Storage Tank #2 (#09023006)		
002U	Lack of appropriately certified operator		
005H	Management policies adversely affecting system operations		
Comments:			

If a deficiency has been addressed, submit documentation to the compliance staff listed below.
Submit this form to:

Gordon Miller at gordon.miller@env.nm.gov

Corrective Action Plan submitted by:

Signature	Printed Name	Date

NMED - Drinking Water Bureau
System Schematic
Cuba Water System
NM3509023