Notification provided via E-mail

August 23, 2024

Jack Crider; jcrider@entranosawater.com
Entranosa Water Association, NM3524626
1330 State Highway 333
Tijeras, NM 87059

RE: 2024 Sanitary Survey Report

Dear Jack Crider

On May 2 and May 3, 2024, the New Mexico Environment Department Drinking Water Bureau (DWB) conducted a sanitary survey site visit at the Entranosa Water Association water system.

The Entranosa Water Association water system must submit a written Corrective Action Plan (CAP) 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)]. For your convenience, a CAP form is included at the end of the sanitary survey report. Enter the date of completion or expected completion next to each deficiency listed. Sign and date the form prior to submittal.

Failure to correct and provide documentation of significant deficiency corrections within the established timeframes, will result in treatment technique violation(s) being issued to Entranosa Water Association water system.

NMED DWB appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's drinking water. If you or members of your staff have any questions or need additional clarification concerning this report, please feel free to contact me at 505-469-7457 or by e-mail at wayne.jeffs@env.nm.gov.

Respectfully,

Wayne Jeffs Digitally signed by Wayne Jeffs
Date: 2024.08.23 14:25:09 -06'00'

Wayne Jeffs, Compliance Officer
Drinking Water Bureau
Water Protection Division

cc: Electronic Central File

NMED
New Mexico Environment Department

SANITARY SURVEY REPORT

For

Entranosa Water Association
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: Wayne Jeffs– Compliance Officer
New Mexico Environment Department
121 Tijeras Ave.
Albuquerque, New Mexico 87102

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

121 Tijeras Ave.
Albuquerque, New Mexico 87102

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.

Wayne Jeffs Digitally signed by Wayne Jeffs
Date: 2024.08.23 14:25:26 -06'00'

Compliance Officer Signature: _____ Date: _____

Wayne Jeffs, Compliance Officer

INTRODUCTION

A sanitary survey enables the New Mexico Environmental 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 Entranosa Water Association 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 Wayne Jeffs Compliance Officer of the NMED DWB on May 2 and May 3, 2024. Also, in attendance was Administrative Contact Jack Crider, and system operators Orlando Archuleta and Andrew Padilla.

BACKGROUND

The previous sanitary survey at Entranosa Water Association was conducted on August 21-22, 2018 by Compliance Officer Oneva Pena. During the previous sanitary survey, seven (7) significant deficiencies were cited. All significant deficiencies identified during the previous sanitary survey were corrected.

SYSTEM DESCRIPTION

The Entranosa water Association water system serves a population of approximately 9,515 with 3,674 active meters. The service area of the Entranosa Water Association comprises an area of approximately 260 square miles and includes approximately 250 miles of distribution piping. The Entranosa Water Association water system is a groundwater system which includes nine (9) active wells located in two well fields, the Horton Well Field (three

wells) and the Pine Canyon well field (6 wells). The water system includes eighteen (18) storage tanks, two main booster stations with Miox treatment, and nine (9) auxiliary booster pump stations.

The Horton Well field (Horton wells S-25, S-9 and S-29) pump water to the 160,000-gallon Ball Tank which is used as a suction reservoir for the Nugent Pump Station and Treatment Plant. The Horton wells are located along the south side of South Mountain and are part of the older portion of the Entranosa water system. Each of the Horton wells are equipped with emergency generators and Mission Controls software.

The Nugent Pump station disinfects water pumped from the Ball Tank with a Miox unit. An additional Miox unit is also located at the Nugent Pump station which acts as a backup in the event of malfunction of the primary disinfection unit. The Nugent pump station then pumps the disinfected water to the Crestview tank farm, where three (3) hydraulically equalized storage tanks with a combined storage volume of approximately 1.5 million gallons. The Crestview tank farm tanks "float" on distribution and serve as a high point for the Horton wellfield supplied portion of the water system.

The Pine Canyon Well field includes five (5) wells: Freedom Well #1, Freedom Well #2, Pine Canyon #1 well, Pine Canyon #2 well and Pine Canyon #3 well. The Pine Canyon well field feeds the 250,000-gallon Frost Road Tank which serves as a suction reservoir for the Frost Road Pump Station/Treatment Plant. All of the Pine Canyon wells are equipped with diesel-fueled emergency generators, and variable frequency drives housed on air-conditioned prefabricated structures. The Frost Road Pump station includes an emergency generator, Miox disinfection system and three (3) 75 HP booster pumps. The Frost Road Pump Station also provides treated water for a self-serve fill station equipped with a control panel for customer access. The fill station is equipped with a backflow prevention device. In addition, a control valve is in an underground vault that also reduces the potential for backflow as it regulates a lower pressure on the fill station side of the valve.

The Frost Road pump station flows to the 100,000-gallon Tierra Encantado tank which is also the same elevation as the top of the water system. The Tierra Encantado tank flows to the Section 19 tank which is located along the south side of South Mountain which also "floats" on distribution.

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.

The distribution network consists of over 250 miles of piping spanning three (3) counties (Santa Fe, Bernalillo and Torrance) and is comprised of approximately 98% PVC and 2% ductile iron pipe. The distribution system functions via 19 pressure zones and contains 3,674 metered service connections. The system operates and maintains numerous booster pumps and pressure reducing valves throughout the distribution system.

The Entranosa Water Association provides water to two consecutive connections: Vista Manana (NM350120) and East Mountain Water Hauling (NM35033010. In addition, the Entranosa Water Association has a filling station located at the Entranosa office building and also has a fill station located at Frost Road Pump Station.

The Entranosa water system average daily demand is approximately 1 million gallons/per day in the cool season and approximately 2 million gallons per day in the warm season.

FIELD ANALYSIS

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

- ☐ Pressure - 96 psi measured at Entranosa Water Association Office

- ☐ Total Source Production –

Well	Flow rate (gpm)
Pine Canyon Well #1	145
Pine Canyon Wells #2	400
Pine Canyon Well #3	410
Freedom Well #1	125
Freedom Well #2	50
Horton Well S-25	320
Horton Well S-9	190
Horton Well S-29	50
Total	1690

- ☐ Chlorine Residual – 0.70 mg/L free chlorine from distribution system at employee restroom in Entranosa Office

- ☐ Chlorine Residual – 0.51 mg/L free chlorine from distribution system at Paako Membrane Bioreactor Plant utility sink.

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.

Six (6) significant deficiencies were identified at the Entranosa Water Association 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 Entranosa Water Association 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 Entranosa Water Association 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 Entranosa Water Association water system was completed on May 3 and May 4, 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)-469-7457 or by e-mail at wayne.jeffs@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:** 003T

   Regulatory Citation: 40 CFR 141.402(e)(1)

   Significant Deficiency Description: Pine Canyon Well #2 (#24626006) is lacking a raw water sample tap at the source.

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

   Required Corrective Action: The Entranosa Water Association must submit a photograph or other documentation acceptable to DWB, indicating that a raw water samp le tap has been installed at the Pine Canyon #2 well ((#24626006).

2. **Significant Deficiency Code:** 004M

   Regulatory Citation: 40 CFR 141.403(a)(4)

   Significant Deficiency Description: The Hill Storage Tank (#24626012) has vegetation growing within close proximity to the tank foundation.

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

Required Corrective Action: The Entranosa Water Association must submit a photograph showing that the vegetation and small trees growing within 6 feet of the Hill Tank foundation have been removed.

Note: The vegetation in close proximity to the storage tank foundation was removed on May 30, 2024. No further action is required.

3. **Significant Deficiency Code:** 003X

   Regulatory Citation: 40 CFR 141.403(a)(4)

   Significant Deficiency Description: The water level indicator on the Hill Tank (#24626012) is broken.

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

   Required Corrective Action: The Entranosa Water Association must submit a photograph showing that the water level indicator for the Hill Storage Tank ((#24626012) has been repaired.

4. **Significant Deficiency Code:** 003X

   Regulatory Citation: 40 CFR 141.403(a)(4)

Significant Deficiency Description: The water level indicator for the Section 2 Tank (Los Leyendas) storage tank (#24626022) is broken.

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

Required Corrective Action: The Entranosa Water Association must submit a photograph to show that the water level indicator for the Section 2 Tank (Los Leyendas) storage tank (#24626022).

5. **Significant Deficiency Code:** 003X

Regulatory Citation: 40 CFR 141.403(a)(4)

Significant Deficiency Description: The water level indicator on the Magic Valley Tank (#24626017) is broken.

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

Required Corrective Action: The Entranosa Water Association must submit a photograph to show that the water level indicator for the Magic Valley storage tank (#24626017) has been repaired.

6. **Significant Deficiency Code:** 004M

   Regulatory Citation: 40 CFR 141.403(a)(4)

   Significant Deficiency Description: The Paako Tank #2 Storage Tank (#24626026) has vegetation growing within close proximity to the tank foundation.

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

Required Corrective Action: The Entranosa Water Association must submit a photograph showing that the vegetation and small trees growing within 6 feet of the Paako Tank #2 ((#24626026) foundation have been removed.

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 Entranosa Water Association water system during the survey.

1. **Notes & Recommendations:** An air relief valve located on a booster pump manifold within the Nugent Pump Station (#24226002) was missing a fine mesh screen to prevent entry of insects or vermin.

Recommended Action: Place a 24-mesh corrosion resistant screen over the air relief blowdown pipe.

Note: The air relief blowdown was equipped with a screen on May 30, 2024. No further action is required.

Sanitary Survey Corrective Action Plan (CAP)

Ground water systems must submit a CAP within 30 days of issuance of the sanitary survey report.
Surface water and GWUDI systems must submit a CAP within 45 days of the issuance of the sanitary survey report

PWSS Name	Entranosa Water Association
PWSS ID	NM3524626
Sanitary Survey Date:	May 2, and May 3, 2024
Date report was issued:	August 23, 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
003T	Pine Canyon Well #2 (#24626006) is lacking a raw water sample tap at the source.		
004M	The Hill Storage Tank (#24626012) has vegetation growing within close proximity to the tank foundation.		
003X	The water level indicator on the Hill Tank (#24626012) is broken.	May 30. 2024	
003X	The water level indicator for the Section 2 Tank (Los Leyendas) storage tank (#24626022) is broken.		
003X	The water level indicator on the Magic Valley Tank (#24626017) is broken.		
004M	The Paako Tank #2 Storage Tank (#24626026) has vegetation growing within close proximity to the tank foundation.		
Comments:			

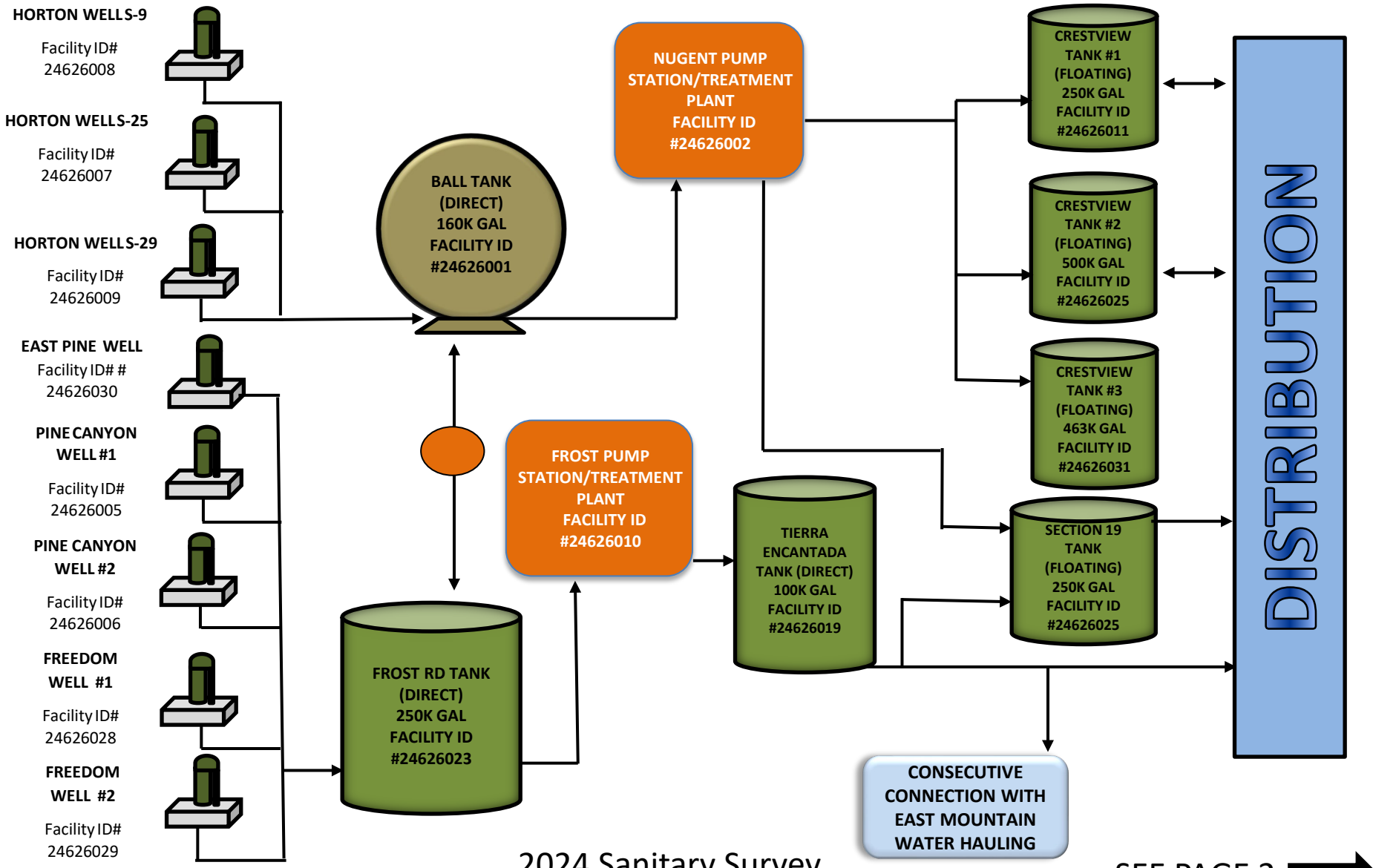
If a deficiency has been addressed, submit documentation to the compliance staff listed below.
Submit this form to:

Wayne Jeffs at wayne.jeffs@env.nm.gov

Corrective Action Plan submitted by:

Signature	Printed Name	Date

NMED - Drinking Water Bureau
System Schematic
Entranosa Water Association
NM3524626



2024 Sanitary Survey

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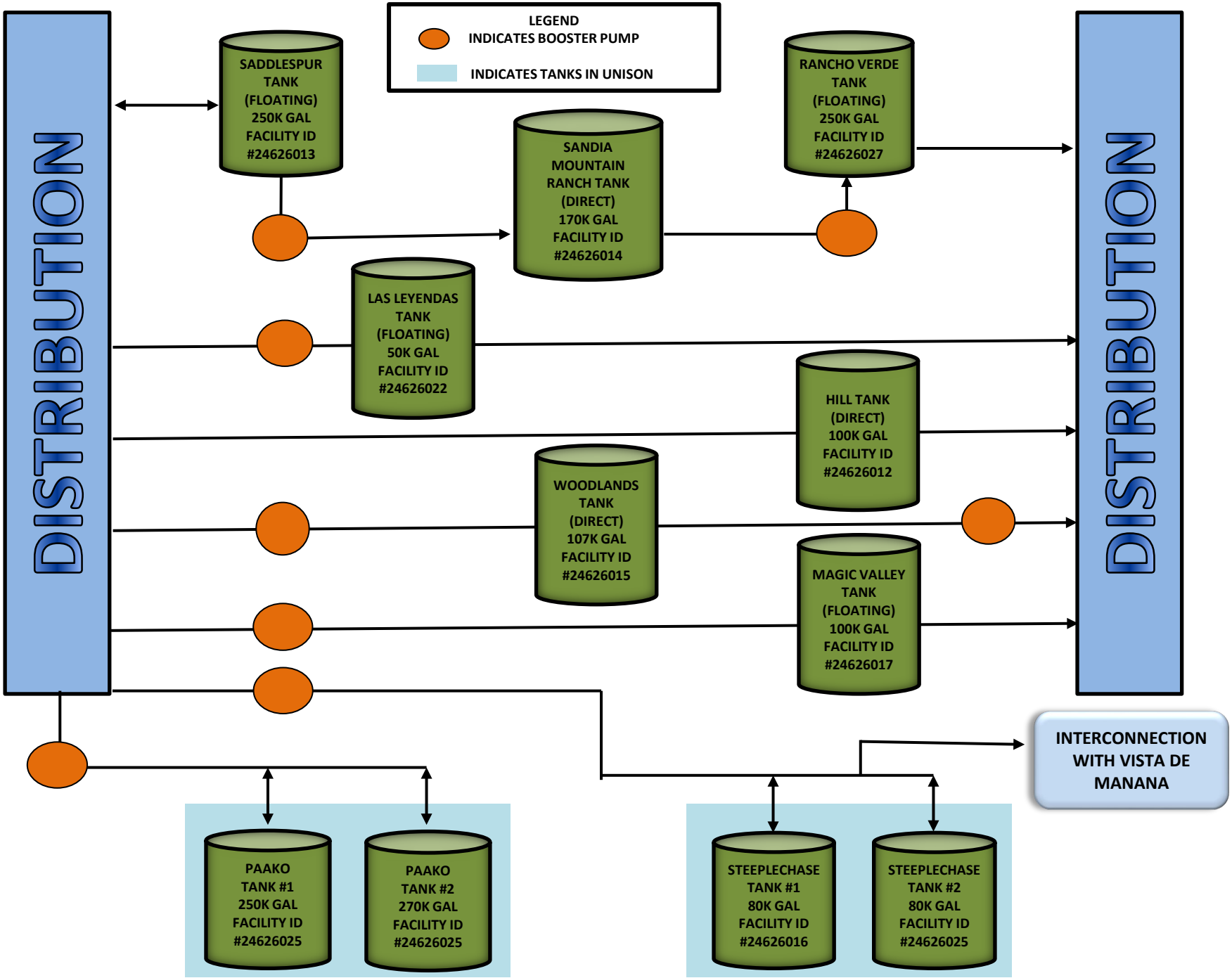
LEGEND
INDICATES BOOSTER PUMP
INDICATES TANKS IN UNISON
DISTRIBUTION
DISTRIBUTION
SADDLESPUR TANK (FLOATING) 250K GAL FACILITY ID #24626013
SANDIA MOUNTAIN RANCH TANK (DIRECT) 170K GAL FACILITY ID #24626014
RANCHO VERDE TANK (FLOATING) 250K GAL FACILITY ID #24626027
LAS LEYENDAS TANK (FLOATING) 50K GAL FACILITY ID #24626022
HILL TANK (DIRECT) 100K GAL FACILITY ID #24626012
WOODLANDS TANK (DIRECT) 107K GAL FACILITY ID #24626015
MAGIC VALLEY TANK (FLOATING) 100K GAL FACILITY ID #24626017
INTERCONNECTION WITH VISTA DE MANANA
PAAKO TANK #1 250K GAL FACILITY ID #24626025
PAAKO TANK #2 270K GAL FACILITY ID #24626025
STEEPLECHASE TANK #1 80K GAL FACILITY ID #24626016
STEEPLECHASE TANK #2 80K GAL FACILITY ID #24626025