



COUNTY OF SAN DIEGO

DEPARTMENT OF ENVIRONMENTAL HEALTH

Land and Water Quality Division

5500 Overland Avenue, Suite 210 • San Diego, CA • 92123

Phone (858) 694-3113 • FAX (858) 514-6583

SMALL PUBLIC WATER SYSTEM INSPECTION REPORT

WATER SYSTEM ID NUMBER <input type="text" value="3701837"/>		INSPECTION DATE <input type="text" value="01/17/2017"/>		SYSTEM CLASSIFICATION <input type="text" value="Community"/>		For Official LPA Use Only <input type="checkbox"/> Title 22 Standards List <input type="checkbox"/> ENP <input type="checkbox"/> BSSP <input type="checkbox"/> Operational Plan <input checked="" type="checkbox"/> Attachments Included	
Source Classification <input type="radio"/> Surface Water <input type="radio"/> Ground Water (W/ Treatment) <input checked="" type="radio"/> Ground Water (No Treatment)		Inspection Time Time In: <input type="text"/> Time Out: <input type="text"/>		<input type="text"/>			
Water System Name <input type="text" value="Wynola Water District"/>				Name of Certified Operator <input type="text" value="Danny Thoner, D1 #39085 & T1 #38319"/>			
Site Address <input type="text" value="4839 Glenside Road, Santa Ysabel, CA 92070"/>				Name of Owner <input type="text" value="Wynola Water District"/>			
Inspector <input type="text" value="Jamelle K. McCullough"/>				Also Present (Name) <input type="text" value="Tim Taschler"/>			

VIOLATION REPORT: The small water system inspection was conducted to determine compliance with the California Health and Safety Code (H&SC); Titles 17 and 22 of the California Code of Regulations (CCR); and California Well Standards (DWR Bulletins 74-81 and 74-90). The items checked below are **NOT** in compliance with stated sections of the H&SC, CCR, DWR Bulletins 74-81 and 74-90, and/or Local Ordinances and need to be corrected.

<p>PERMITS</p> <input type="checkbox"/> Health Permit - §8.02.040 <input type="checkbox"/> Public Water System Permit - §116525(a) <input type="checkbox"/> Technical Report - §116530 <input type="checkbox"/> Source Water Assessment - §64560 <input type="checkbox"/> Change of Ownership - §116525(a) <input type="checkbox"/> Permit Amendment - §116550(a), §64556 <p>OPERATING CRITERIA</p> <input type="checkbox"/> Operator Certification - §106885 <input type="checkbox"/> Operational Requirements - §116555 <input type="checkbox"/> Standby Sources - §64414 <input type="checkbox"/> Source Capacity - §64554(a) <input type="checkbox"/> Source Flow Meter - §64561 <input checked="" type="checkbox"/> Operation and Maintenance Plan - §64600 <input type="checkbox"/> Surface Water Operations Plan - §64661 <p>RECORDS/REPORTING</p> <input checked="" type="checkbox"/> Routine Sample Siting Plan - §64422 <input type="checkbox"/> Bacteriological Reporting - §64423.1(c) <input type="checkbox"/> Analytical / EDT Reporting - §64469 <input type="checkbox"/> Record Maintenance - §64470 <input type="checkbox"/> Disinfection Residual/By-Product Monitoring Plan - §64534.8 <input type="checkbox"/> Surface Water Treatment Records - §64662 <input type="checkbox"/> LPA Notification - §64663 <input type="checkbox"/> Surface Water Monthly Report - §64664 <input type="checkbox"/> Groundwater Monthly Report <input type="checkbox"/> Electronic Annual Report - §116530	<p>WATER QUALITY MONITORING</p> <input type="checkbox"/> Bacteriological Standards - §64421, §64426.1 <input type="checkbox"/> Bacteriological Monitoring - §64423, §64424 <input type="checkbox"/> Inorganic Chemical Standards - §64431 <input type="checkbox"/> Inorganic Chemical Monitoring - §64432 <input type="checkbox"/> Organic Chemical Standards - §64444 <input type="checkbox"/> Organic Chemical Monitoring - §64445.1 <input type="checkbox"/> Nitrate/Nitrite Standards - §64432.1 <input type="checkbox"/> Radionuclide Standards - §64442, §64443 <input type="checkbox"/> Secondary MCL Standards - §64449 <input type="checkbox"/> Disinfection Residuals/By-Product Rule - §64530 (Ch. 15.5) <input type="checkbox"/> Lead and Copper Rule - §64675 (Ch. 17.5) <p>SURFACE WATER TREATMENT</p> <input type="checkbox"/> Surface Water Treatment Rule - §64652 <input type="checkbox"/> Filtration - §64653 <input type="checkbox"/> Disinfection Treatment - §64654 <input type="checkbox"/> Source Water Monitoring - §64655 <input type="checkbox"/> Turbidity Monitoring - §64655 <input type="checkbox"/> Disinfection Monitoring and Contact Time - §64656 <input type="checkbox"/> LT2 ESWTR Monitoring - 40 CFR §141.70 <p>TREATMENT SYSTEM</p> <input checked="" type="checkbox"/> Additives (NSF 60/61 Approval) - §64590-§64591 <input type="checkbox"/> Chlorinator Functioning - §64650(b) <input type="checkbox"/> Filter Functioning - §64650(b) <input type="checkbox"/> Treatment System Maintenance - §64600 <input type="checkbox"/> Sampling of Treated Water Sources - §64432.8
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<p><u>PUBLIC NOTIFICATION</u></p> <p><input type="checkbox"/> Public Notification §116450, §64463, §64666</p> <p><input checked="" type="checkbox"/> Emergency Notification Plan - §116460</p> <p><input type="checkbox"/> Consumer Confidence Report - §116470, §64480-§64483</p> <p><u>SURFACE WATER SOURCE PROTECTION</u> (H&SC, Title 22 CCR)</p> <p><input type="checkbox"/> Intake vulnerable to contamination</p> <p><input type="checkbox"/> Intake pipe screened or otherwise protected from debris</p> <p><input type="checkbox"/> Area clear of brush, debris, waste, vectors</p> <p><input type="checkbox"/> Standby source available</p> <p><u>GROUND WATER SOURCE PROTECTION</u> (DWR Bulletins 74-81 and 74-90, H&SC)</p> <p><input checked="" type="checkbox"/> Enclosure of well and appurtenances</p> <p><input type="checkbox"/> Well/well casing with cover or lock</p> <p><input type="checkbox"/> Well cap watertight</p> <p><input type="checkbox"/> Well access openings sealed</p> <p><input type="checkbox"/> Well marked for identification</p> <p><input type="checkbox"/> Concrete base/well slab constructed properly</p> <p><input type="checkbox"/> Check valve installed at well head</p> <p><input type="checkbox"/> Backflow prevention protection</p> <p><input checked="" type="checkbox"/> Area clear of brush, debris, waste, rodent activity</p> <p><input type="checkbox"/> Well vulnerable to possible contaminating activity</p> <p><input type="checkbox"/> Insufficient well protection zone</p> <p><input type="checkbox"/> Well construction - §64560(c)</p> <p><input type="checkbox"/> Well destruction - §64560.5</p> <p><input type="checkbox"/> Groundwater Rule - §64430, §141.400</p>	<p><u>RESERVOIR/STORAGE</u></p> <p><input type="checkbox"/> Storage Capacity - §64554(a)(2)</p> <p><input type="checkbox"/> Reservoir Coating/Lining - §64585(a)(1)</p> <p><input type="checkbox"/> Contaminant Exclusion - §64585(a)(2)</p> <p><input type="checkbox"/> Sampling Tap - §64585(a)(3)</p> <p><input type="checkbox"/> Reservoir Design and Construction - §64585(b)</p> <p><input type="checkbox"/> Area clear of brush and debris</p> <p><u>DISTRIBUTION SYSTEM</u></p> <p><input type="checkbox"/> Distribution System Layout - §64604</p> <p><input type="checkbox"/> Minimum Pressure - §64602</p> <p><input type="checkbox"/> Water Mains and Valves - §64570-§64578</p> <p><input type="checkbox"/> Flushing Pipelines - §64575</p> <p><input type="checkbox"/> Equipment Maintenance (pumps, pipes, valves)</p> <p><u>CROSS CONNECTION CONTROL</u></p> <p><input type="checkbox"/> Cross Connection Control Program - §7584</p> <p><input checked="" type="checkbox"/> Adequate Protection Maintained - §7604</p> <p><input type="checkbox"/> Testing Backflow Prevention Devices - §7605</p> <p><input type="checkbox"/> Maintenance of Records - §7605</p> <p><u>OTHER</u></p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p> <p><input type="checkbox"/> _____</p>
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OBSERVATIONS/VIOLATION REPORT:

The following observations were noted during the inspection of the drinking water system. Additional detail on each of the identified violations of the California Code of Regulations, California Health and Safety Code, and California Well Standards are provided below.

BACKGROUND

Wynola Water District (WWD) water system is classified as a community public water system and provides pressurized potable water for daily use to 71 residential homes of Wynola Estates. The water system has five active ground water sources: Well 3 (PS Code 3701837-003), Well 7 (PS Code 3701837-007), Well 9 (PS Code 3701793-009), Well 10 (PS Code 3701837-010) and Well 11 (PS Code 3701837-011). Water storage consists of one 65,000 gallon and one 45,000 gallon above ground bolted steel storage tanks. The water system has 5,000 gallons of additional storage in the horizontal pressure tank used to pressurize the distribution system. The County of San Diego Local Primacy Agent (LPA) issued a State Water Supply Permit on August 27, 2013. **A current bacterial sample site plan, emergency notification plan and operational plan shall be on file with the Department of Environmental Health (DEH). Templates for these documents have been provided.**

WATER SOURCE

Rodent activity was observed at each well. Take immediate measures to minimize rodent activity including burrowing near wells slabs. Several suggestions were offered during the inspection such as adding a layer of gravel around the well slabs. Please note poisons should never be used near water sources and equipment.

WELL 03 – According to information on file with DEH, Well 3 is constructed to a total depth of 1020 feet with no known sanitary seal. Water flows from Well 3 directly to the large storage tank. Well 3 is equipped with a 1.5 hp submersible pump and produces approximately 8-15 gpm depending on the water level of the well. At the surface the well is equipped with a sounding tube and the well discharge line has a water meter. **Due to insulation of discharge pipe it is unable to be determined if Well 3 is equipped with a check valve as required. Within 30 days provide identification at Well 3.**

WELL 07 – According to information on file with DEH, Well 7 is constructed to a total depth of 780 feet with no known sanitary seal. Well 7 is equipped with a 5 hp submersible pump and produces approximately 23 gpm. Well 7 is equipped with a water meter and sounding tube as required, but **due to insulation at discharge line it is unclear if a check valve is installed.**

WELL 09 – The Well Completion Report dated 12/20/96, identifies a total well depth of 920 feet and a sanitary seal made of cement to a depth of 60 feet. Well 9 is equipped with a 20 hp submersible well pump and produces approximately 80 gpm. At the surface, Well 9 is equipped with a water meter and sounding tube, but **due to pipe insulation a check valve could not be verified.**

WELL 10 – The Well Completion Report dated 09/29/01, identifies a total well depth of 915 feet and a sanitary seal filled with cement grout to 55 feet. Well 10 is equipped with a 3 hp submersible pump and produces approximately 22gpm. At the surface, Well 10 is equipped with a sounding tube and water meter as required. **Due to insulation at discharge line, it was unable to be determined if well 10 is equipped with a required check valve.**

WELL 11 – **The main producing well of 5 active wells at WWD. Well 11 is not protected in a secure enclosure and is therefore subject to vandalism. Within 60 days provide a secure enclosure for Well 11.** The Well Completion Report dated 12/17/03, identifies a total well depth of 975 feet with a cement sanitary seal depth to 55 feet. Well 11 is equipped with a 20 hp submersible well pump and produces approximately 65 gpm. At the surface, Well 11 has a water meter and sounding tube, but a **check valve was not observed due to insulation at the discharge line.**

TREATMENT PROCESS

The WWD water system is classified as an untreated community water system. During the inspection it was revealed that WWD has been hand pouring liquid chlorine down each well every month. Immediately discontinue the practice of hand dosing chlorine down each well. Treatment must be properly engineered and approved through DEH. It is unclear whether WWD was attempting to disinfect the water prior to routine bacterial sample collection or treat the well for iron build-up. Either scenario requires DEH approval and specific procedures and sampling to verify safety of water delivered. If WWD would like to pursue system disinfection or iron filtration, please consult with DEH and submit plans for review and approval. **Liquid chlorine packaging observed in the pump house did not identify the product was NSF approved. Additives and chemicals introduced into the drinking water supply must meet NSF/ANSI 61 standards.**

STORAGE FACILITIES

The WWD water system has one 65,000 gallon (known as T1) and one 45,000 gallon (known as T2) above ground bolted steel storage tanks. The tanks are located within a locked chain link enclosure that also secures the 5,000 gallon horizontal pressure tank, Well 3, pump house and emergency system generator. The tanks are constructed to fill from the top and draw water from the bottom of each tank. The tanks can be isolated such that if one tank requires maintenance, the other tank is available to provide water to the WWD. Each tank is equipped with a water level indicator, ladder with safety cage sample tap, overflow piping and screened vent at top of tank.

DISTRIBUTION SYSTEM

Water is pumped from the 5 active wells to the storage tanks. Well 3 flows directly into T1, due to its proximity. Pumping is controlled by the tank float level indicator. From the tanks water flows to the pump house which contains two 20 hp transfer pumps that are controlled by a variable frequency drive and delivers water to the 5,000 gallon horizontal pressure tank which maintains proper system pressure. Water enters the distribution system via a 6 inch transmission line made of transite pipe. Off this 6 inch line are 19 wet barrel fire hydrants. A combination of materials exists between the mains to the laterals and is either 1 inch PVC pipe or ¾ inch black flexible tubing.

PUMP FACILITIES

The WWD water system utilizes and maintains five submersible well pumps and two, 20 hp booster pumps run by a variable frequency drive located in the pump house. The booster pumps work together with the 5,000 gallon pressure tank to maintain system pressure.

MANAGEMENT & OPERATIONS

All personnel associated with the operation, maintenance and management of the WWD water system shall have a copy of and be familiar with the conditions contained within the State Water Supply Permit. **A current water system operational plan shall be on file with DEH.**

OPERATOR CERTIFICATION

The WWD has identified Danny Thoner as Chief Water Operator. Mr. Thoner is a D1 (#39085 Expiration 04/01/20) and T1 (#38319 Expiration 04/01/19) certified water operator and has been contracted to oversee the Wynola Water District until Tim Taschler (Director, Treasurer and Office Manager of the water board) obtains the proper certifications. Mr.

Thoner will visit the site at least three times each month and is available for emergency water situations.

WATER QUALITY & DATA MONITORING

The WWD is required to submit monthly results within the distribution system, for bacteriological water quality, per the bacterial sample site plan. The bacterial sample site plan on file with DEH was last submitted in 2007 and based on 2016 sample locations is no longer being followed. **Within 30 days, submit a bacterial sample site plan to DEH for review and approval.**

Chemical sampling requirements are outlined on the final page of this report. If WWD intends to pursue system disinfection or iron treatment, additional chemical testing will be required.

Along with submitting all water quality sample results to the LPA, the certified laboratory performing the water quality analysis must also submit the results electronically to the State Water Resources Control Board (SWRCB) – Division of Drinking Water. It is the responsibility of the WWD to ensure that the laboratory submits the sample results through Electronic Data Transfer (EDT) to the SWRCB using the prescribed electronic deliverable format. When submitting the water quality data, the lab must use the following Primary Source Codes to properly identify the WWD water system:

Primary Source Code – To Be Reported by Laboratory to SWRCB	
SOURCE NAME	PRIMARY SOURCE CODE (PS CODE)
Well 03	3701837-003
Well 07	3701837-007
Well 09	3701837-009
Well 10	3701837-010
Well 11	3701837-011

OBSERVATIONS/VIOLATION REPORT Continued:

SUMMARY OF ACTION ITEMS REQUIRED FOR THE WYNOLA WATER DISTRICT

1. WWD is classified as an untreated community water system and shall not introduce additives to the drinking water unless approved by DEH. Since 2011, according to water board records, WWD has been hand chlorinating the wells on a monthly basis before routine bacterial sample collection. This is an unapproved practice and must immediately discontinue. Additionally, any chemical added to the drinking water must meet NSF/ANSI 61 standards and the packaging observed in the pump house did not appear to meet drinking water standards. If WWD would like to pursue water system treatment, an application must be reviewed and approved by DEH. The application will include a water supply permit amendment and additive/equipment specifications.
2. **Within 30 days** of receipt of this report, provide a current Bacterial Sample Site Plan (BSSP). A template has been included with this report. The BSSP shall include a detailed system map which identifies pertinent water system infrastructure including the location of all know water lines and their size and material make up. The last BSSP submitted to DEH was in 2007 and at a minimum must be updated every 10 years.
3. **Within 60 days** of receipt of this report, provided documentation (email photographs) that Well 11 is maintained within a secured enclosure. If 60 days is not enough time, please request an extension from DEH.
4. **Within 30 days** of receipt of this report, provide documentation that rodent activity/digging near well slabs of the 5 active sources is being discouraged.
5. **Within 30 days** of receipt of this report provide documentation that Well 3 is properly identified as required.
6. **Within 30 days** of receipt of this report, provide a current Emergency Notification Plan to the LPA (template included).
7. **Within 60 days** consult with a cross connection specialist to determine whether the check valve on the fire system line in the pump house provides adequate protection for the degree of hazard that exists. A testable backflow device shall be installed to isolate the water that sits in the fire sprinkler line. This device shall be tested annually to verify proper function.
8. **By summer 2017**, provide documentation that each well is equipped with a check valve as required. It is suggested to take photographs of each well discharge line and catalog for future reference, after damage from frost passes and insulation can safely be removed.

Submit all requested documentation and photographs to: Jamelle.mccullough@sdcountry.ca.gov.

During the inspection the transite pipe transmission line was a topic of conversation. While the majority of chemical water quality testing is sample from the sources, WWD may consider Asbestos sampling from various spots in the distribution system to offer customers piece of mind and confirm whether or not the old distribution lines are introducing asbestos levels into the water supply. Additionally, 2017 is a significant sampling year for WWD. Please note that if source water exceeds the iron MCL by more than 3 times, iron (and manganese) filtration/treatment will be mandated for the WWD.

02/11/2017

Jamelle K. McCullough

Jamelle K McCullough
Environmental Health Inspector
Local Primacy Agency

Date

The following chart(s) detail required water quality monitoring. If analyses have been completed and are not recorded below, please submit a copy to the attention of Jamelle McCullough at the address listed on the cover of this inspection report or email jamelle.mccullough@sdcounty.ca.gov.

Please ensure that required tests are complete for all constituents that make up the panel. Please see the attached standards list.

Source: DISTRIBUTION SYSTEM				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Lead and Copper Rule	09/2016	07/2019	Every 3 years	N/A

Source: GROUNDWATER – WELL 3 (ACTIVE)				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Inorganic Chemical Standard	06/2014	2017	Every 3 years	N/A
Nitrate Standard	07/2016	2017	Annual	N/A
Nitrite Standard	06/2014	2017	Every 3 years	N/A
Secondary MCL Standards	06/2014	2017	Every 3 years	N/A
Volatile Organic Chemical (VOC) Standard	06/2014	2020	Every 6 years	N/A
Synthetic Organic Chemical (SOC) Standard	05/2001	1 st Qtr 2017	Every 9 years	Yes
Radioactivity Standard, Gross Alpha	07/2016	2025	Every 9 years	Yes
Radioactivity Standard, Uranium	07/2016	2025	Every 9 years	Yes

Source: GROUNDWATER – WELL 7 (ACTIVE)				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Inorganic Chemical Standard	11/2014	2017	Every 3 years	N/A
Nitrate Standard	07/2016	2017	Annual	N/A
Nitrite Standard	11/2014	2017	Every 3 years	N/A
Secondary MCL Standards	11/2014	2017	Every 3 years	N/A
Volatile Organic Chemical (VOC) Standard	08/2011	2017	Every 6 years	N/A
Synthetic Organic Chemical (SOC) Standard	03/2005	1 st Qtr 2017	Every 9 years	Yes
Radioactivity Standard, Gross Alpha	07/2016	2025	Every 9 years	Yes
Radioactivity Standard, Uranium	07/2016	2025	Every 9 years	Yes

Source: GROUNDWATER – WELL 9 (ACTIVE)				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Inorganic Chemical Standard	11/2014	2017	Every 3 years	N/A
Nitrate Standard	07/2016	2017	Annual	N/A
Nitrite Standard	11/2014	2017	Every 3 years	N/A
Secondary MCL Standards	11/2014	2017	Every 3 years	N/A
Volatile Organic Chemical (VOC) Standard	09/2011	2017	Every 6 years	N/A
Synthetic Organic Chemical (SOC) Standard	02/2006	1 st Qtr 2017	Every 9 years	Yes
Radioactivity Standard, Gross Alpha	07/2016	2025	Every 9 years	Yes
Radioactivity Standard, Uranium	07/2016	2025	Every 9 years	Yes

Source: GROUNDWATER – WELL 10 (ACTIVE)				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Inorganic Chemical Standard	06/2014	2017	Every 3 years	N/A
Nitrate Standard	07/2016	2017	Annual	N/A
Nitrite Standard	06/2014	2017	Every 3 years	N/A
Secondary MCL Standards	06/2014	2017	Every 3 years	N/A
Volatile Organic Chemical (VOC) Standard	06/2014	2020	Every 6 years	N/A
Synthetic Organic Chemical (SOC) Standard	02/2006	1 st Qtr 2017	Every 9 years	Yes
Radioactivity Standard, Gross Alpha	07/2016	2025	Every 9 years	Yes
Radioactivity Standard, Uranium	07/2016	2025	Every 9 years	Yes

Source: GROUNDWATER – WELL 11 (ACTIVE)				
CHEMICAL	LAST TEST	TEST DUE	FREQUENCY	WAIVER
Inorganic Chemical Standard	11/2014	2017	Every 3 years	N/A
Nitrate Standard	07/2016	2017	Annual	N/A
Nitrite Standard	11/2014	2017	Every 3 years	N/A
Secondary MCL Standards	11/2014	2017	Every 3 years	N/A
Volatile Organic Chemical (VOC) Standard	09/2011	2017	Every 6 years	N/A
Synthetic Organic Chemical (SOC) Standard	10/2005	1 st Qtr 2017	Every 9 years	Yes
Radioactivity Standard, Gross Alpha	07/2016	2025	Every 9 years	Yes
Radioactivity Standard, Uranium	07/2016	2025	Every 9 years	Yes