



DRAFT CEQA INITIAL STUDY

Adapted from 2019 CEQA Guidelines APPENDIX G Environmental Checklist Form, Final Text, Revised June 11, 2019

1. **Project title:** Frazier Nut Farms- Ion Exchange Water Treatment System – Water System No. 5000530
2. **Lead agency name and address:** Stanislaus County Environmental Resources
3800 Cornucopia Way
Modesto, California 95358
3. **Contact person and phone number:** Rachel Riess, Senior Environmental Health Specialist
209-525-6720
4. **Project location:** Frazier Nut Farms
10830 Yosemite Boulevard, Waterford, CA 95386
Parcel No. 080-006-047-000
5. **Project sponsor's name and address:** Frazier Nut Farms
10830 Yosemite Boulevard, Waterford, CA 95386
6. **General Plan designation:** Agricultural
7. **Zoning:** A-2-40
8. **Description of project:**

Frazier Nut Farms (FNF) is located at 10830 Yosemite Boulevard in Waterford, Stanislaus County, California, as shown on Figure 1. FNF operates Public Water System Number (PWS) Number CA5000530, a non-transient, non-community water system. The FNF PWS currently supplies untreated groundwater pumped from a single well for use by FNF employees and visitors. Due to nitrate detected in the FNF water supply at concentrations exceeding the California Maximum Contaminant Level (MCL) of 10 mg/L, Stanislaus County Department of Environmental Resources (DER) issued Compliance Order No. DER-18R-006 (Order) in March 2018 that required action by FNF to address nitrate levels in the water supply.

As a Local Primacy Agency (LPA), The Stanislaus County Department of Environmental Resources (DER) is delegated the authority to regulate all PWSs within DER jurisdiction that have less than 200 service connections, including PWS No. CA5000530. On October 4, 2021, FNF submitted an application for an amendment to the existing PWS permit to authorize the addition of a nitrate removal treatment system. The permit amendment application is provided as Attachment A. The purpose of this California Environmental Quality Act (CEQA) Initial Study (IS) is to evaluate potential environmental impacts associated with the proposed project, which is comprised of the installation and operation of an ion exchange system designed to remove nitrate from the groundwater supply well for on-site use. The findings from this CEQA IS will inform DER's discretionary decision to amend the existing PWS permit.

Prior to operation of the treatment system, FNF will install a well backflow prevention device and have it tested by a Stanislaus County approved tester¹. The proposed groundwater treatment system components include six (6) Culligan stainless steel portable ion exchange tanks filled with *Resintech SIR-100-HP* nitrate reducing resin, and six (6) replacement exchange tanks (which will be housed at the Culligan Water Company). The system also includes an in-line nitrate analyzer, high nitrate shut off valve, sample port, chlorine disinfection injection port, and 1500-gallon storage tank for treated water.

The system will be placed on a concrete pad (estimated dimensions of 10 feet x 12 feet) adjacent to an existing corrugated metal building. The proposed location for the treatment system is shown on Figure 2 and a treatment system schematic is provided on Figure 3. As shown on Figure 2, water from the supply well will be treated by the system and then distributed via pipeline for use at the FNF Office and Employee Break Room.

As shown on Figure 3, water from the supply well will enter the treatment system for removal of nitrates by the ion exchange system. The treatment system will operate automatically. The well pump will turn on when the water level in the storage tank reaches a low level and will shut down when the water level reaches a high level.

To ensure that the treatment system is effectively removing nitrates from groundwater, FNF personnel will observe and log real-time nitrate concentrations in the system effluent daily via the in-line nitrate analyzer. When nitrate levels approach 8 mg/l, FNF will arrange for Culligan to deliver the six replacement exchange tanks and remove the six used exchange tanks for regeneration and storage at the Culligan Water Company. For added protection, the treatment system is also equipped with a nitrate monitoring system that will alert FNF operators when the nitrate levels approach the MCL as a trigger for replacement of the six exchange tanks.

The estimated schedule for replacement of the exchange tanks is monthly; to be confirmed after startup of the system. After a replacement event, a flush of the six exchange tanks with well water will be performed. The flush will continue until the nitrate levels indicated by the in-line analyzer have stabilized below the MCL. The volume of flushed water is expected to be less than five gallons per month. Flushed water will be stored on-Site in a container/tank and disposed off-Site at the treatment facility in Newman, California if nitrate concentrations exceed the MCL of 10 mg/L for nitrate. The flush water storage container/tank will be maintained at the same location as the treatment system.

Photographs of the proposed area for construction of the system are provided in Attachment B. A detailed Public Water System Report prepared by AM Consulting Engineers in December 2020 is provided as Attachment C, which is the basis for the treatment system description.

9. **Surrounding land uses and setting:** The surrounding parcels are zoned as agriculture and currently occupied predominantly by orchards.
10. **Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):** None

¹ <http://www.stancounty.com/er/environmentalhealth/pdf/certified-backflow-testers-ccc-specialists-12-11-19.pdf>

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|---|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Agriculture & Forestry Resources | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Transportation / Traffic |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- ☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____

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EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, than the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration.

Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

- a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). References to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
 - 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
 - 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
 - 9) The explanation of each issue should identify:
 - a) the significant criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significant.



I. AESTHETICS -- Except as provided in Public Resource Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Discussion: The proposed project involves the installation and operation of an ion exchange water treatment system and 1,500 gallon treated water storage tank in the location shown on Figure 2. The proposed location for the treatment system is just to the north of an existing building and just south of a paved area on a developed parcel. Proposed project activities would not affect any scenic vista, damage any scenic resource, degrade the existing visual quality of any public view, or create a new source of substantial light or glare. In summary, the proposed would have no impact on aesthetics.

Mitigation: None.

II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion:

The proposed project is located on a parcel currently zoned "General AG – 40 Acre". Completion of the proposed project would not result in any changes to land use or zoning. Specifically, the proposed project would not result in the conversion of Farmland to non-agricultural use, or the loss of forest land. In summary, the proposed would have no impact on agricultural or forest resources.

Mitigation: None.

III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?				X
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?				X
c. Expose sensitive receptors to substantial pollutant concentrations?				X
d. Result in other emissions such as those leading to odors adversely affecting a substantial number of people?				X

Discussion:

FNF is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Ambient air quality in the San Joaquin Valley is classified as non-attainment with respect to federal and state standards for ozone and particulate matter with diameter 10 micrometers (μm) or smaller (PM-10), particulate matter with diameter less than 2.5 μm are classified as non-attainment with respect to state standards. SJVAPCD administers Air Quality Attainment Plans for particulate matter, ozone and carbon monoxide. Operation of the proposed treatment system is expected to have no impact on air quality because pressure from the groundwater pumped from the adjacent supply well would cause groundwater to flow through the ion exchange treatment system, with no additional air emissions or odors generated. Vehicle emissions associated with the monthly transport of the ion exchange vessels between the Site and a Culligan facility in Modesto, California would be negligible with respect to air quality standards. In summary, the proposed project is expected to have no impact to air quality.

Mitigation: None.

References:

San Joaquin Valley Air Pollution Control District, 2021. *Ambient Air Quality Standards and Valley Attainment Status*. <https://www.valleyair.org/aqinfo/attainment.htm> Accessed September 22, 2021.

IV. BIOLOGICAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Discussion: The proposed location for the ion exchange treatment system is between a paved area and an existing building. No modification of existing habitat would occur due to the proposed project. The Site is developed as a nut processing facility, so proposed project activities would not impact riparian habitats or sensitive natural communities. The proposed Site is not located within a biologically sensitive area per the California Natural Diversity Database. No federally protected wetlands or potential wetlands are identified in the proposed project area on the Natural Communities Dataset Viewer, no impacts to wetlands are anticipated. No modification to any habitat that would interfere with migration of any species is anticipated due to proposed project activities. The proposed project would not conflict with any policies or ordinances protecting biological resources or conflict with any habitat conservation plans. No impacts to biological resources are anticipated.

Mitigation: None.

References:

California Natural Diversity Database Maps. Viewed via BIOS Viewer, September 22, 2021.

California Department of Water Resources, Sustainable Groundwater Management. Natural Communities Dataset Viewer. <https://gis.water.ca.gov/app/NCDatasetViewer/> . Accessed September 22, 2021

V. CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?				X
c) Disturb any human remains, including those interred outside of formal cemeteries?				X

Discussion: The proposed project Site is on a developed parcel between a paved area and a building. Installation and operation of the system would not involve any ground disturbing activities and would not result in the disturbance of human remains or any previously unexposed historical or archaeological resources. In conclusion, no impacts anticipated related to cultural resources are anticipated.

Mitigation: None.

VI. ENERGY	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Discussion:

Pressure generated by untreated groundwater pumped from an existing well would provide the pressure required to cause water to flow through the proposed ion exchange treatment system. Added energy use associated with the proposed project would be limited to the energy required to transport and exchange the treatment vessels approximately once per month. No wasteful, inefficient, or unnecessary consumption of energy are anticipated during construction or operation of the ion exchange water treatment system. In summary, no impacts to energy resources are anticipated.

Mitigation: None

VII. GEOLOGY AND SOILS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42.				X
ii. Strong seismic ground shaking?				X
iii. Seismic related ground failure, including liquefaction?				X
iv. Landslides?				X
b. Result in substantial soil erosion or the loss of topsoil?				X
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d. Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Discussion: Per the United States Department of Agriculture Natural Resources Conservation Service, soil types present at the Site include clay loam and gravelly clay loam. Geologic hazards are not identified in the Site vicinity in the Stanislaus County General Plan or on California Department of Conservation web maps. The nature and scale of the proposed project would not result in any seismic activity, impacts to unstable or expansive soil, or require use of septic tanks or alternative wastewater disposal systems. The proposed project does not include any ground disturbing activities. In summary, the proposed would have no impact on geologic and soil resources

Mitigation: None

References:

California Department of Conservation. *California Geologic Survey – Geologic Maps and Geologic Hazard Maps*

Stanislaus County, 2015. *Stanislaus County General Plan, Chapter 5*

USDA Natural Resources Conservation Service. *Web Soil Survey*. August 2021.

VIII. GREENHOUSE GAS EMISSIONS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Discussion:

The amount of GHG emissions associated with the proposed project are limited to emissions from transportation used during the exchange of the resin vessels, to and from the Culligan Water Facility in Modesto, California, which is anticipated to occur monthly. The small increase in GHG emissions would be less than significant.

Mitigation: None

IX. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Discussion The proposed project does not involve the transport, use or disposal of hazardous materials, or the release or hazardous materials into the environment at the Site or elsewhere. The Site is not included in the California Department of Toxic Substances Control (DTSC) list of hazardous waste and substances sites (Cortese List) and is not located within two miles of a public airport. The closest airport to the Site is the Modesto City-County Airport located approximately 9 miles to the west. The proposed project would not interfere with the implementation with any emergency response or evacuation plan or pose any risks associated with wildland fires. In summary, the proposed would result in no impacts associated with hazards and hazardous materials.

Mitigation: None.

References: California Department of Toxic Substances Control, 2020. *Hazardous Waste and Substances List*. Downloaded from <https://calepa.ca.gov/SiteCleanup/CorteseList/>. August 2021.

X. HYDROLOGY AND WATER QUALITY -- Would the project:				
	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				X
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site?				X
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or per IS <sig				X
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Discussion: When the proposed treatment system requires flushing following installation of new ion exchange cartridges, the water used to flush the system would be captured at an on-Site storage tank and disposed of off-Site at an approved treatment facility. There would be no discharge of system waste to land or surface water. The proposed project would not result in any discharge to land or water on-Site, so would not violate any water quality standards or waste discharge requirements. Further there are no reasonably anticipated alterations to drainage patterns at the Site. The Site and surroundings are identified by FEMA to be Zone X – Area Determined to be Outside the 0.2% Annual Chance Floodplain, and is not in a tsunamic or seiche zone, there is no risk of pollutant release to the environment from a flood as the Site is not in an identified flood hazard zone.

Mitigation: None

References:

Federal Emergency Management Agency, Flood Map Service Center, <https://msc.fema.gov/portal/search?AddressQuery=10830%20Yosemite%20Blvd%2C%20Waterford%2C%20CA%2095386#searchresultsanchor>, accessed August 2021

XI. LAND USE AND PLANNING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Physically divide an established community?				X
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Discussion: The proposed project would not result in any changes in land use. Further, there are no established communities in the proposed project area, so no established communities would be split due to the proposed project. The Site is located on land zoned as "General Agriculture 40 Acre". The proposed project would not conflict with this zoning designation. In summary, the proposed would have no impact on land use or planning.

Mitigation: None

References:

Stanislaus County, 2015. Stanislaus County General Plan, Chapter 5

XII. MINERAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion: Per maps prepared by the State Division of Mines and Geology, the Site is not located in an area identified by the State Division of Mines and Geology as containing commercially viable mineral resources. Further, the Stanislaus County General Plan Conservation/Open Space Element does not identify any areas in addition to those identified by the State Division of Mines and Geology for valuable mineral resources. There are no known mineral resources of significance in the proposed project area. However, the proposed project would not prevent access to potential mineral resources should there become interest in the area. In summary, the proposed would have no impact to mineral resources.

Finding: No Impact

Mitigation: None

References:

California Department of Conservation, Division of Mines and Geology, 1993. Mineral Land Classification of Stanislaus County, California, Special Report 173. Higgins, C., Dupras, D. 1993.

Stanislaus County, 2015. Stanislaus County General Plan, Chapter 5.

XIII. NOISE -- Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b. Generation of excessive ground-borne vibration or ground-borne noise levels?				X
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion: The level of noise associated with proposed system installation and operation is expected to be minimal and well below the standards established in the Stanislaus County General Plan – Chapter 14 – Noise Element. The proposed would not result in a substantial increase in ambient noise levels or ground-borne vibrations. There is no public airport located within a two-mile radius of the Site and there are no sensitive receptors (i.e., school, nursing home, hospital) located in the Site vicinity. In summary, there are no impacts expected with respect to noise.

Mitigation: None

XIV. POPULATION AND HOUSING -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion: No population growth or displacement of people would occur as result of the proposed project. No impacts to population or housing are anticipated.

Mitigation: None

XV. PUBLIC SERVICES –	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project result in the substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Discussion: The proposed project involves installation and operation of a water treatment system to supply safe drinking water primarily intended for existing group of employees. The proposed project would not result in a need for new construction or alteration of any governmental facilities. In conclusion, there would be no impact on public services.

Mitigation: None.

XVI. RECREATION	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion: The proposed project involves installation and operation of a water treatment system for an existing population of employees at the Site. The proposed project does not include recreational facilities and would not have any impact on the demand for regional parks or recreational facilities. In summary, there would be no impact on recreation resources.

Mitigation: None.

XVII. TRANSPORTATION -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?			X	
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				X
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d. Result in inadequate emergency access?				X

Discussion: The proposed project does not involve any changes to existing roadways, so no increase in hazards due to geometric design features or inadequate emergency access would occur. Since the proposed project involves an anticipated monthly exchange of the resin vessels, there are additional transportation considerations for the proposed project. However, projects along an existing "high quality" transit corridor are presumed to cause less than a significant transport impact. Since the proposed project located adjacent to CA-State Route 132, less than significant on transportation resources are anticipated.

Mitigation: None.

References:

California Environmental Protection Agency. *CEQA Guidelines, Section 15064.3(b)*.

XVIII. TRIBAL CULTURAL RESOURCES -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				X

Discussion: The proposed project would take place in a developed area adjacent to an existing building, as shown on Figure 2. The proposed project would not involve ground disturbing activities, so discovery of previously unknown tribal cultural resources is highly unlikely. No impacts to tribal cultural resources are anticipated.

According to Kristin Doud, Principal Planner with Stanislaus County, as of September 14, 2021, Stanislaus County had not received any requests for consultation from the tribes listed with the California Native American Heritage Commission. Therefore, no tribal notifications were required or completed in conjunction with California Assembly Bill 52 for the proposed project.

Mitigation: None.

IXX. UTILITIES AND SERVICE SYSTEMS -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Discussion: The proposed project would not result in an increased demand for utilities or services including water, wastewater treatment, storm water drainage, electrical power, natural gas or telecommunications facilities, nor would the proposed generate any solid waste. The ion exchange vessels used in the ion exchange system would be replaced as needed, and as noted above, and water used to flush the system would be captured and stored until it can be delivered to an approved treatment facility. Upon exhausting the ion exchange vessels, the vessel would be disposed at an approved facility. In summary, there would be no impact to utilities or services.

Mitigation: None.

XX. WILDFIRE – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Description: State Responsibility Areas are boundaries adopted by the Board of Forestry and Fire Protection. These designated State Responsibility Areas are areas where the California Department of Forestry and Fire (CAL FIRE), has a financial responsibility for fire suppression and prevention. These designated areas can be determined through review of the Stanislaus County Fire Hazard Severity Zone Maps for State Responsibility Area and Local Responsibility Area (CAL FIRE, 2007). Review of the Stanislaus County Fire Hazard Severity Zone Maps for State Responsibility Area and Local Responsibility Area indicate the proposed project is in a Local Responsibility Area.

The proposed project would not impair an adopted emergency response plan or emergency evacuation plan. The Project location is not in a State Responsibility Area or lands classified as very high fire hazard severity zones.

The proposed project would not require the installation or maintenance of associated infrastructure (such as fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment and would not impair an adopted emergency response plan or emergency evacuation plan. The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides due to runoff, post-fire slope instability, or drainage changes. Based on these findings, there are no wildfire related impacts associated with the project.

Mitigation: None

References:

California Department of Forestry and Fire (CAL FIRE), 2007. Stanislaus County Fire Hazard Severity Zone Maps in State Responsibility Area. November 7. <https://egis.fire.ca.gov/FHSZ/>. Accessed August 2021.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE --	Potentially Significant Impact	Less Than Significant With Mitigation Included	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X

Discussion:

The proposed project involves installation and operation of an ion exchange water treatment system. The proposed project does not have the potential to degrade the quality of an environment or impact a fish or wildlife habitat. Further, the project will not have impacts that are cumulatively considerable in connection with other past, present or future projects. Moreover, the project is not expected to degrade the quality of the environment or cause substantial adverse effects directly or indirectly on human beings. On the contrary, the proposed project will enable FNF to provide a safe and reliable source of drinking water to its employees and visitors.

DRAFT

FIGURES

DRAFT

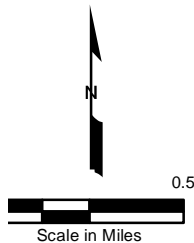
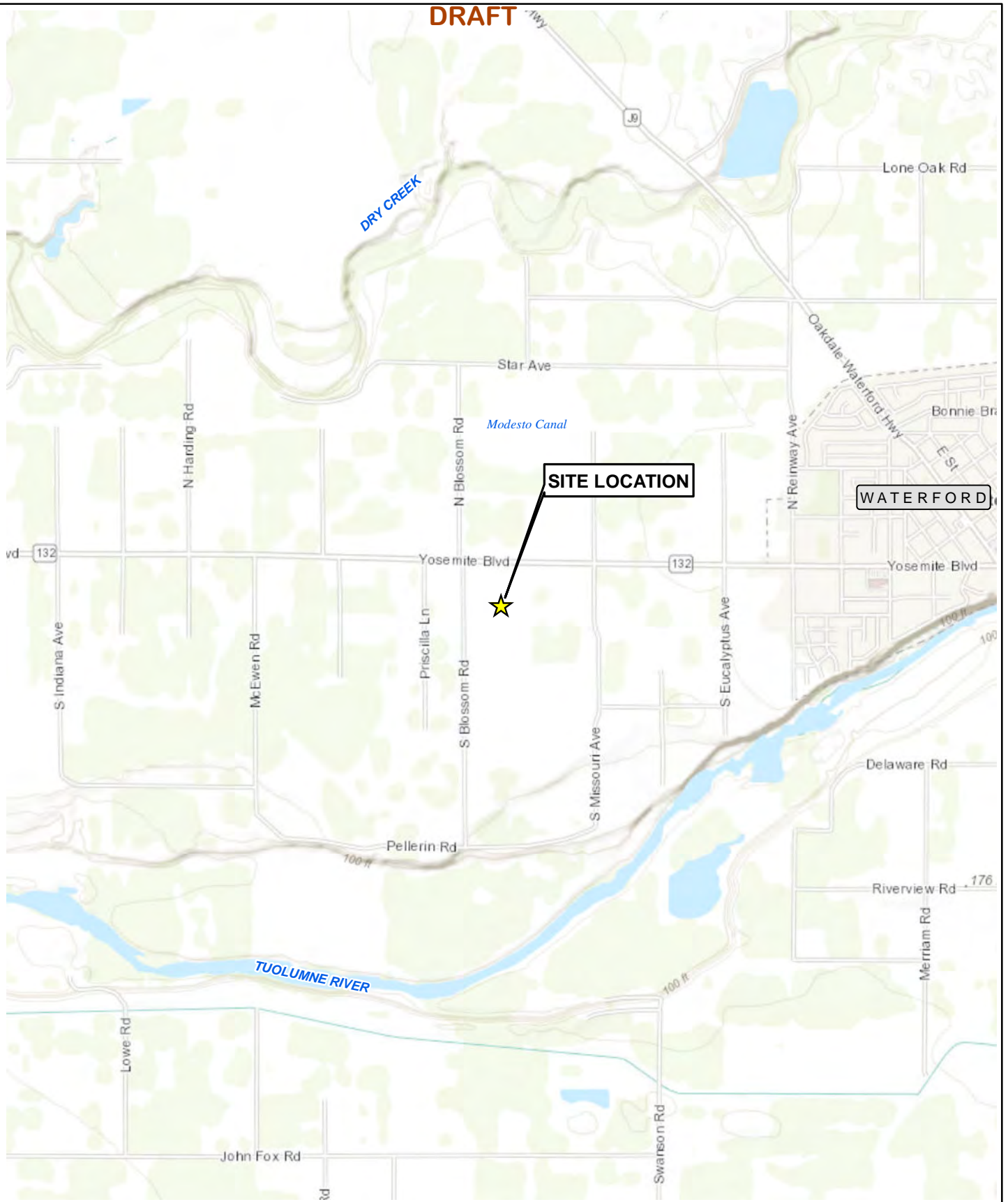


FIGURE 1

SITE LOCATION MAP

FRAZIER NUT FARMS
WATERFORD, STANISLAUS COUNTY, CALIFORNIA

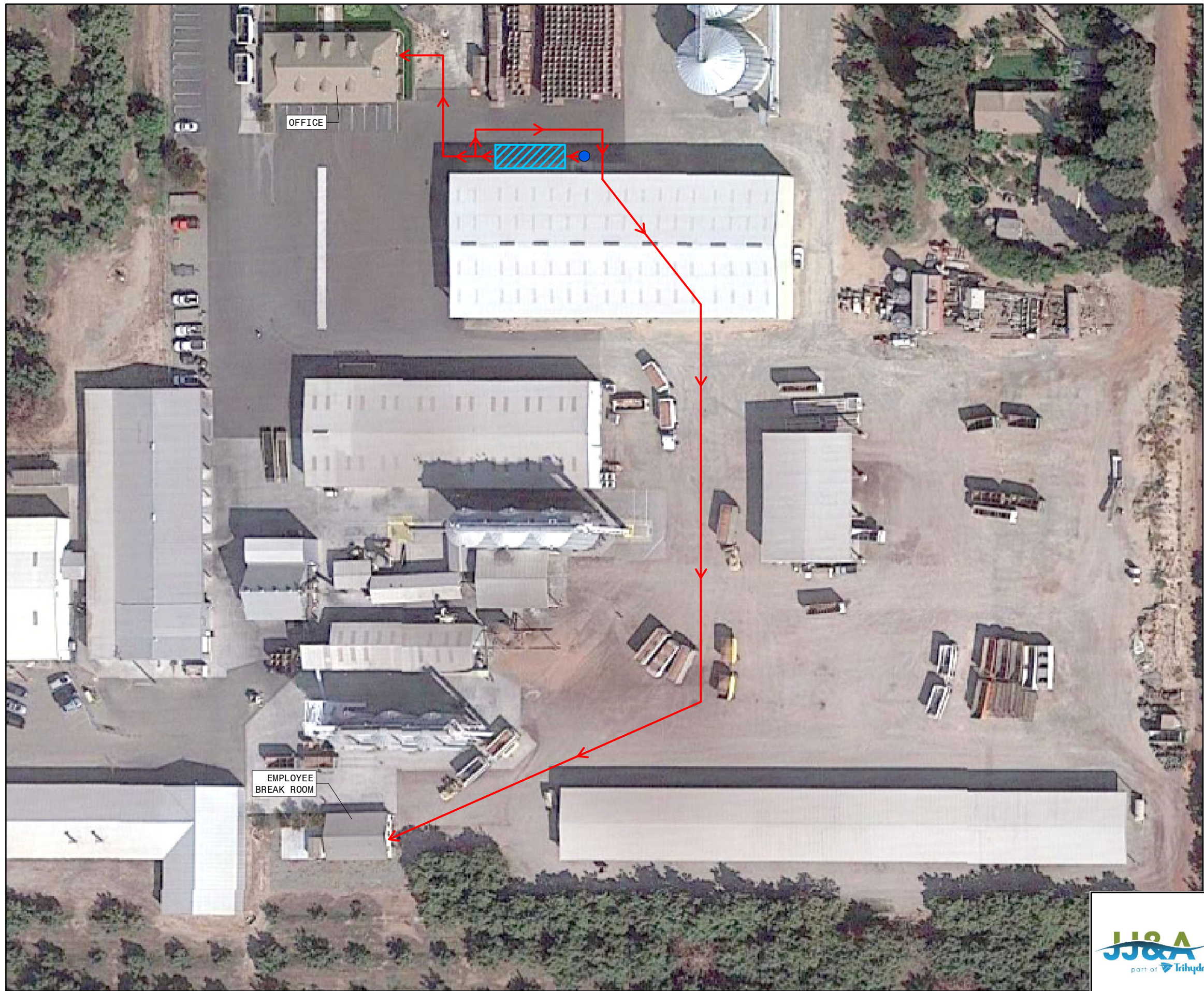
Drawn By: DPG

Checked By: LM




Date: 9/13/21

File: Figure 1 Site Location Map.mxd

Path: J:\GIS\FrazierNutFarms\Reports\Figure 2 Site Map 9 30 21.mxd



LEGEND

-  WELL SITE
-  3" DISTRIBUTION LINE; approximated location.
-  PROPOSED LOCATION FOR ION EXCHANGE WATER TREATMENT SYSTEM

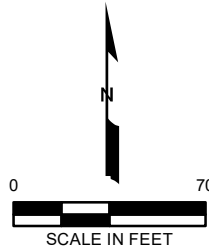


FIGURE 2

SITE MAP

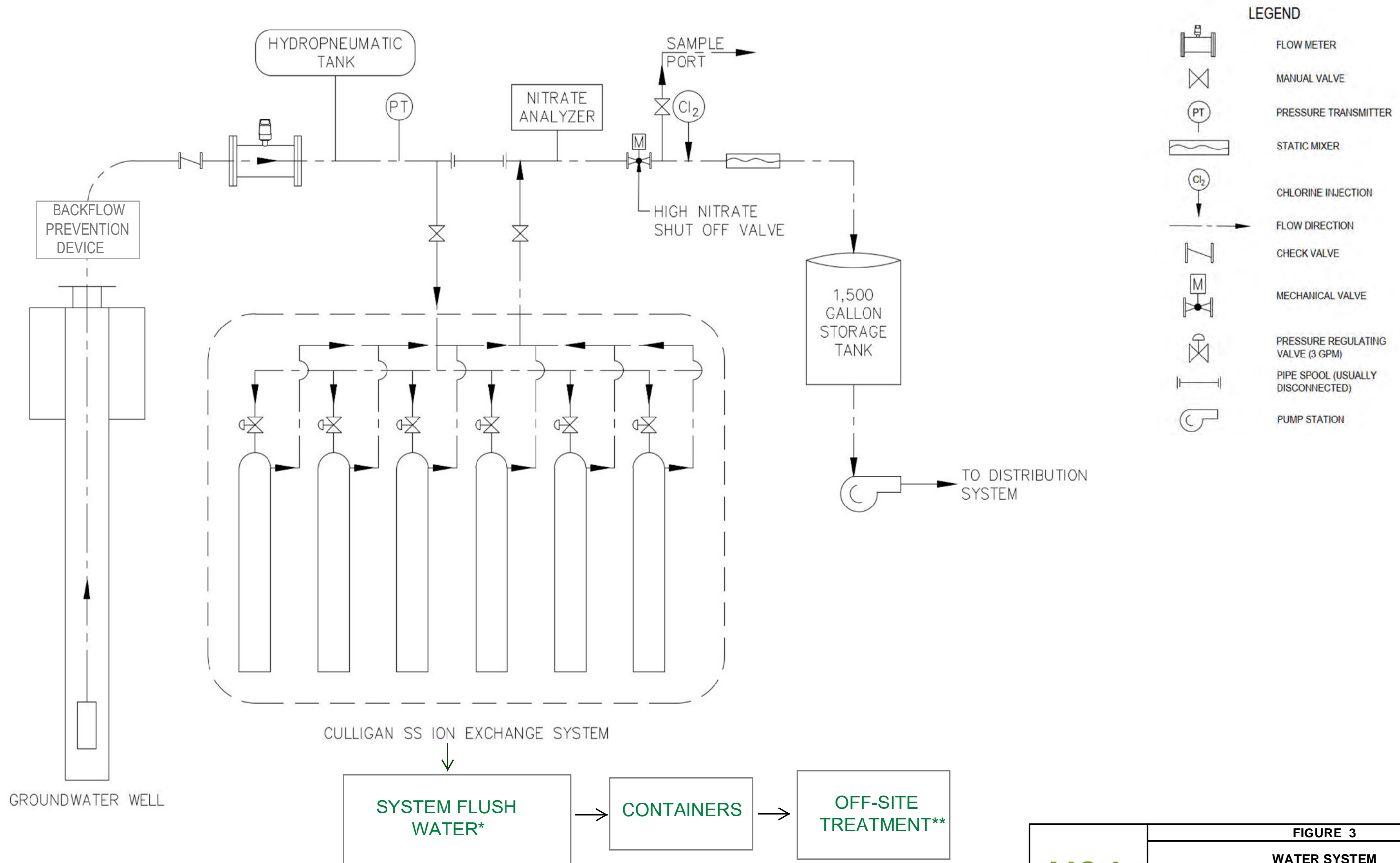
**FRAZIER NUT FARMS
WATERFORD, STANISLAUS COUNTY, CALIFORNIA**

Base figure source:
AM Consulting Engineers, 2020. Public Water System Report,
Frazier Nut Farms, Inc., Waterford, California. December




Drawn By: DPG Checked By: LM Date: 9/30/21 File: Figure 2 Site Map 9 30 21.mxd

Path: J:\GIS\FrazierNutFarms\Reports\Figure 3 Process Flow Diagram.mxd



- * Following Ion Exchange System tank replacement events.
** If drinking water maximum contaminant levels (MCLs) exceeded.

Base figure Source:
AM Consulting Engineers, 2020. Public Water System Report,
Frazier Nut Farms, Inc., Waterford, California. December

	FIGURE 3			
	WATER SYSTEM PROCESS FLOW DIAGRAM			
	FRAZIER NUT FARMS WATERFORD, STANISLAUS COUNTY, CALIFORNIA			
Drawn By: DPG	Checked By: LM	Date: 9/13/21	File: Figure 3 Process Flow Diagram.mxd	

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ATTACHMENT A

APPLICATION TO AMEND EXISTING PERMIT APPLICATION TO AMEND EXISTING PERMIT



**APPLICATION FOR AN AMENDMENT
TO EXISTING PUBLIC WATER SUPPLY PERMIT**

Applicant: Frazier Nut Farms, Inc.
(Enter the name of legal owner, person(s) or organization)

System Name: Frazier Nut Farms, Inc.

System Number: CA5000530

System Address: 10830 Yosemite Blvd.

City: Waterford Zip: 95368

**TO: Stanislaus County Department of Environmental
Resources
3800 Cornucopia Way, Suite C
Modesto, CA 95358-9494**



Pursuant and subject to the requirements of the California Health and Safety Code, Division 104, Part 12, Chapter 4 (California Safe Drinking Water Act), Article 7, Section 116550, relating to changes requiring an amended permit, application is hereby made to amend an existing water supply permit to
add a nitrate removal treatment system

(Applicant must state specifically what is being applied for - whether to construct new works, make alterations or additions in works or sources, or

change or modify treatment.)

I (We) declare under penalty of perjury that the statements on this application and on the accompanying attachments are correct to my (our) knowledge and that I (we) are acting under authority and direction of the responsible legal entity under whose name this application is made.

Signature: Layton McDonald Date: 10/4/21

Signed by (Print): Layton McDonald Title: Plant Manager

Mailing address: 10830 Yosemite Blvd City: Waterford Zip: 95368

Telephone: (209) 522-1406 Email: layton@fraziernut.com

Number of people using the water 60 or more days a year: _____ Number of service connections: 1

Note: Stanislaus County Code requires collection of fees to recover staff time issuing Public Water System Permits. The fee is a five-hour minimum at the current weighted labor rate. Please attach a check made payable to: **Stanislaus County Department of Environmental Resources.**

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ATTACHMENT B

PHOTOGRAPHIC LOG



Photo 1. Existing Frazier Nut Farms Public Water System supply well and pad (facing southwest).



Photo 2. Proposed location of ion exchange water treatment system, adjacent to well pad (facing southeast).



Figure 3. Proposed location of ion exchange water treatment system in the foreground (facing east).

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ATTACHMENT C
ENGINEERING REPORT

DRAFT

**FRAZIER NUT FARMS, INC.
WATERFORD, CALIFORNIA**



PUBLIC WATER SYSTEM REPORT

December 2020



Prepared by:



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ABBREVIATIONS

ADD	Average Day Demand
ADF	Average Daily Flow
APN	Assessor's Parcel Number
bgs	Below Ground Surface
BOD	Biochemical Oxygen Demand
CCR	California Code of Regulations
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CHSC	California Health and Safety Code
CO	Compliance Order
GAL	Gallons
gpd	Gallons per Day
gpm	Gallons per Minute
HP	Horse Power
MAF	Monthly Average Flow
MCL	Maximum Contaminant Level
MDD	Maximum Day Demand
MG	Million Gallons
MGD	Million Gallons per Day
mg/L	Milligrams per Liter
ml/L	Milliliter per Liter
R	Range
RWQCB	Regional Water Quality Control Board
RWUA	Recycled Water User Agreement
T	Township
TSS	Total Suspended Solids
WDRs	Waste Discharge Requirements
WWTF	Wastewater Treatment Facility

CHAPTER 1 INTRODUCTION

1.1. Purpose of this Report

This report is being prepared regarding the Frazier Nut Farms, Inc. Water System. The intent of this report is to demonstrate that the proposed improvements to Frazier Nut Farms Water System will successfully reduce the Nitrate concentration and provide safe drinking water that complies with the requirements of Section 116555(a)(1) of the California Health and Safety Code (CHSC), Section 64431 of the California Code of Regulations (CCR), Title 22 and meets the requirements stated in Compliance Order No. DER-18R-006 by Stanislaus County Department of Environmental Resources dated March 22, 2018.

1.2. Background

Frazier Nut Farms, Inc. is located the Stanislaus County along Highway 132, Yosemite Boulevard, approximately one (1) mile north of the Tuolumne River. More specifically, Frazier Nut Farms, Inc. is located at 10830 Yosemite Boulevard in Waterford, CA. Figure 1-1 displays the location of the Frazier Nut Farms, Inc. facility.

The Frazier Nut Farms Water System is classified by the Division of Drinking Water as a non-transient non-community water system supplied entirely by a single groundwater well. Non-transient non-community water systems are required to collect quarterly water samples and report the analytical results to the Division of Drinking Water. The quarterly monitoring results showed that the nitrate concentration in the source Well was below 50% of the maximum contaminant level (MCL) between the years 2015 to 2017, and the 2017 sample was below the detectable limit. As of March 2018, the source Well had surpassed the MCL requirement set by the Division of Drinking Water and as a repercussion were issued the Compliance Order No. DER-18R-006.

1.3. Compliance Order

Frazier Nut Farms, Inc. received from Stanislaus County Department of Environmental Resources Compliance Order (CO) No. DER-18R-006 on March 22, 2018. The CO was issued because of noncompliance with the nitrate MCL after test results obtained from two samples dated March 6, 2018 and March 9, 2018. Enclosed in Appendix A is a copy of the CO. The average nitrate concentration from those two samples was 11 mg/l as N. Title 22, Division 4, Chapter 15, Article 4, establishes primary drinking water standards, monitoring and reporting requirements for inorganic constituents. Non-transient non-community water systems must comply with the nitrate MCL of 10 mg/l, as N, as established in Title 22 CCR Section 64431.

According to California Health and Safety Code, Section 116555 and Section 64431, Title 22, CCR, the Water System is required to provide monthly public notifications informing users of the failure to comply with the nitrate MCL and collect quarterly water samples for nitrate. The CO requires Frazier Nut Farms, Inc. to demonstrate, no later than April 10, 2021, that the water delivered by the Frazier Nut Farms, Inc. Water System complies with the nitrate MCL.

FRAZIER NUT FARMS

WATER SYSTEM IMPROVEMENTS
PUBLIC WATER SYSTEM REPORT

LEGEND

MAJOR ROADWAYS



SCALE IN FEET

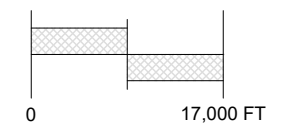
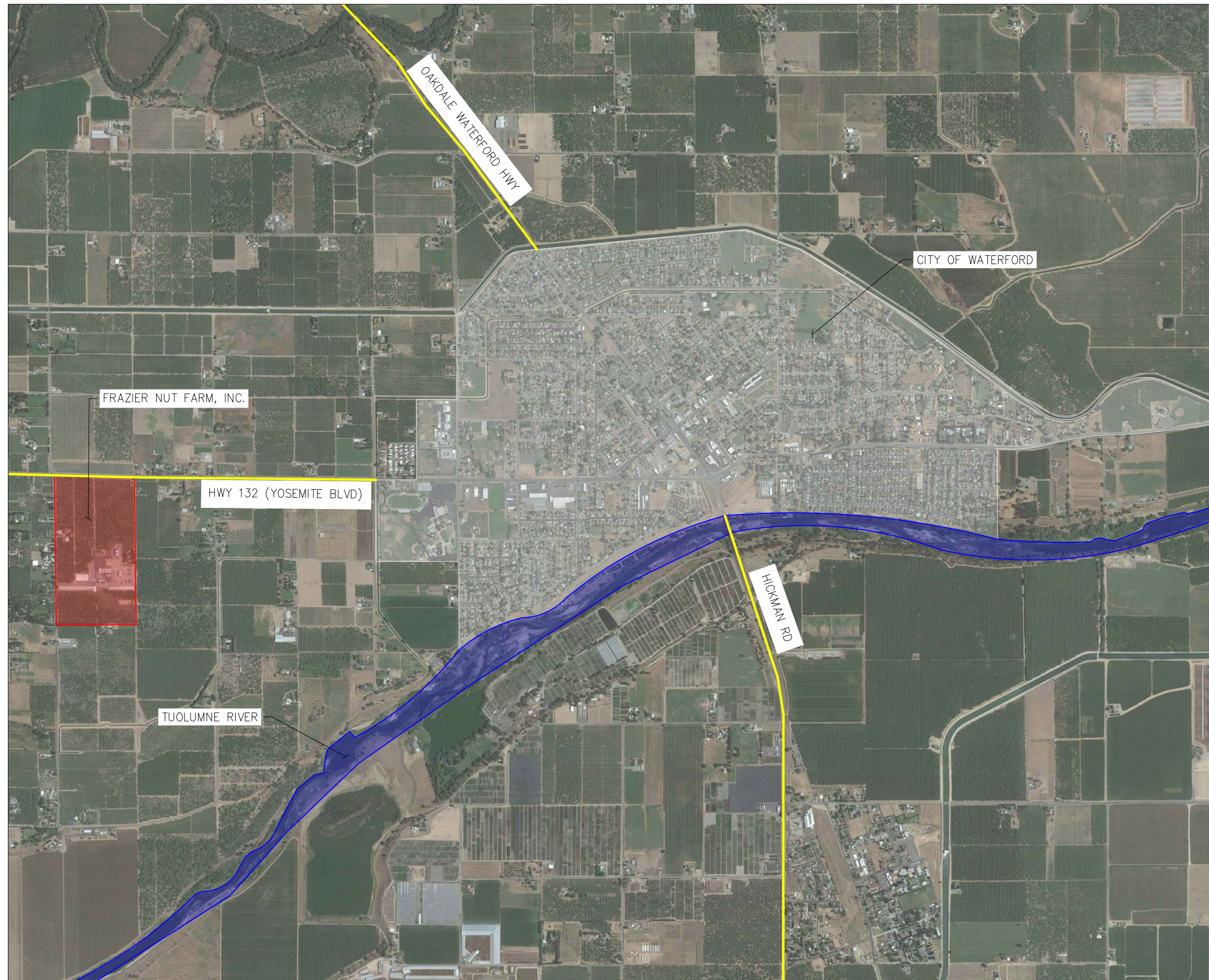


FIGURE 1-1
FRAZIER NUT FARMS GENERAL
LOCATION



1.4. Water Demand

Frazier Nut Farms Water System serves visitors, employees, and residents of a nut processing facility. Frazier Nut Farms serves approximately 64 visitors, 25 employees and residents through 14 service connections. According to the Division of Drinking Water compliance order dated March 22, 2018, the Frazier Nut Farms Water System's 14 services connections were all unmetered. As of 2019, the Frazier Nut Farms Water System has installed one Wellhead water meter. Table 1-1 contain the water consumption from January through December of 2019.

Table 1-1 Frazier Nut 2019 Water Consumption

Month	Date of reading	No. of Days	Meter Reading	Gallons Used	Gallons Per Day
1	1/7/2019	24	1,079,400	13,200	550
2	2/19/2019	43	1,100,600	21,200	493
3	3/26/2019	35	1,117,700	17,100	489
4	4/12/2019	17	1,126,300	8,600	506
5	5/14/2019	32	1,136,800	10,500	328
6	6/24/2019	41	1,153,200	16,400	400
7	7/23/2019	29	1,158,800	5,600	193
8	8/15/2019	23	1,163,100	4,300	187
9	9/24/2019	40	1,171,900	8,800	220
10	10/28/2019	34	1,199,100	27,200	800
11	11/19/2019	22	1,214,900	15,800	718
12	12/26/2019	37	1,230,400	15,500	419

The water production data above has been used to determine the Frazier Nut Farms Water System average day demand (ADD), Maximum Day Demand (MDD) and peak hour demand (PHD). Table 1-2 contains the total demand, ADD, MDD, and PHD for the water system. The average day demand was calculated from the maximum month demand reported for the region. The MDD was calculated using the ADD of the maximum month and a factor of 1.5, as specified by the CCR Title 22 Section 64554. The PHD was calculated by applying a factor of 1.5 to the maximum day demand as specified by Section 64554.

Table 1-2 Frazier Nut Farms Water System Water Demand

Year	Total Demand	Max. Month Demand	Month	Avg. Day Demand		Max. Day Demand		Peak Hour Demand	
	Gallons	Gallons		GPD	gpm	GPD	gpm	GPD	gpm
2019	164,200	27,200	October	800	0.56	1,200	0.83	1800	1.25

1.5. Water Quality

According to the CCRs, Title 22, Section 64431, public water systems must comply with the MCLs displayed in Table 1-3.

Table 1-3 Public Water System Maximum Contaminant Levels

Inorganic Chemical	Maximum Contaminant Level (mg/L)
Aluminum	1.
Antimony	0.006
Arsenic	0.010
Asbestos	7 MFL*
Barium	1.0
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Mercury	0.002
Nickel	0.1
Nitrate (as nitrogen)	10.0
Nitrate + Nitrite (sum as nitrogen)	10.0
Nitrite (as nitrogen)	1.0
Perchlorate	0.006
Selenium	0.05
Thallium	0.002
* MFL = million fibers per liter; MCL for fibers exceeding 10 um in length.	

A water sample collected on March 6, 2018 revealed that the water system was out of compliance with the above listed CCR for Public Water Systems. A follow up samples was collected on March 9, 2020. The monitoring results for those samples can be found below in Table 1-4.

Table 1-4 Monitoring Results

Sample Date	Sample Results	Average
3/6/2018	11	11
3/9/2018	11.3	

The monitoring results for the March 9, 2020 sample can be found below in Table 1-5.

Table 1-5 March 9, 2020 Monitoring Results

Constituent	Sample Results	EPA Limit	Units
Est TDS By Conductivity	446.38	500.00	mg/L
Conductivity	646.20		microS/cm
pH*	7.7	6.50 to 8.50	
Turbidity	0.13	0.50	NTU
Turbidity Filtered	<0.100	0.50	NTU

Table 1-5 March 9, 2020 Monitoring Results

Constituent	Sample Results	EPA Limit	Units
Aluminum by ICP*	<50.000	200.00	ug/L
Arsenic by ICP (Screen)	<10.000	10.00	ug/L
Barium*	181.59	2,000.00	ug/L
Calcium*	46.97		mg/L
Copper (Cu)*	<0.015	1.30	mg/L
Hardness (CaCO ₃)*	226.61		mg/L
Iron (Fe)*	<0.050	0.30	mg/L
Lead by ICP (Screen)	<15.000	15.00	ug/L
Magnesium*	26.50		mg/L
Manganese (Mn)*	<0.020	0.05	mg/L
Potassium	3.14		mg/L
Silica*	58.66		mg/L
Sodium*	52.66		mg/L
Strontium (Sr)	0.61		mg/L
Zinc (Zn)*	<0.050	5.00	mg/L
Chloride*	22.27	250.00	mg/L
Fluoride*	<0.200	4.00	mg/L
Nitrate as N*	12.70	10.00	mg/L
Nitrite as N*	<0.100	1.00	mg/L
Sulfate*	44.44	250.00	mg/L
Tannins	<2.000		mg/L
Color*	<5.000	15.00	color
Color after Acidification	<5.000		color
Bicarbonate	274.96		mg/L
Carbonate	0.00		mg/L
Total Alkalinity*	274.96		mg/L
Alkalinity as CaCO ₃	225.47		mg/l
TOC*	0.48		mg/L

From the above listed table, it can be observed that the Frazier Nut Farms Water System is still out of compliance for Nitrate as (N). Enclosed is Appendix B is a copy of the complete monitoring report.

CHAPTER 2 EXISTING WATER SYSTEM

2.1. Overview

This Section provides a description of the existing Frazier Nut Farms Water System. In general, the non-transient noncommunity water system provides potable water to an approximately 64.78 acre service area. The source Well is located within the Frazier Nut Farms property, Assessor Parcel Number (APN) 080-006-047-000, and is the only water source for the facility. The parcel is currently owned by James G. and Sheryl L. Frazier. Figure 2-1 displays the location of the groundwater Well.

2.2. Water Source

The Water System is owned and operated by the Frazier Nut Farms, Inc. The Frazier Nut Farms, Inc. Water System is supplied potable water via a single groundwater Well with no further treatment after extraction. The groundwater Well was constructed in August of 2011 and was drilled to a depth of one hundred sixty (160) feet below ground surface (bgs). The Well was equipped with a bentonite annular seal from ground surface to 78 feet bgs and an eight (8) inch diameter blank plastic casing to one hundred forty (140) feet bgs. Upon completion of the Well, the Well had a static water level of 84 feet bgs. Enclosed is Appendix C is a copy of the Well Completion Report.

2.3. Water Distribution System

According to the 2016 water system report submitted to the Division, the Frazier Nut Farm, Inc. provides potable water to approximately 64 visitors, 25 employees/residents and has approximately 14 service connections.

The Well primarily serves the office building and the employee breakroom building. Within each building there are restrooms, sinks, lavatories, and showers. Figure 2-1 shows the location of the distribution system mains that convey water to those two locations.

2.4. Water System Operation

The system is operated by six (6) registered distribution operators. The names and operator class can be found in Table 2-1.

Table 2-1 Water System Distribution Operators

Name	Distribution Grade	Treatment Grade
Tom McCoy	Grade 4 #8642	Grade 3 #22642
Keven Jones	Grade 2 #48425	Grade 2 #38634
Joe Burnett	Grade 2 #47089	Grade 2 #38380
Troy Long	Grade 2 #43386	Grade 2 #42993
Brandon Steed	Grade 1 #51298	Grade 1 #42473
Evan Schmidt	Grade 1 #52393	Grade 1 #43891

FRAZIER NUT FARMS

WATER SYSTEM IMPROVEMENTS
PUBLIC WATER SYSTEM REPORT

LEGEND



WELL SITE



3" DISTRIBUTION PIPE



SCALE IN FEET

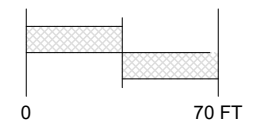
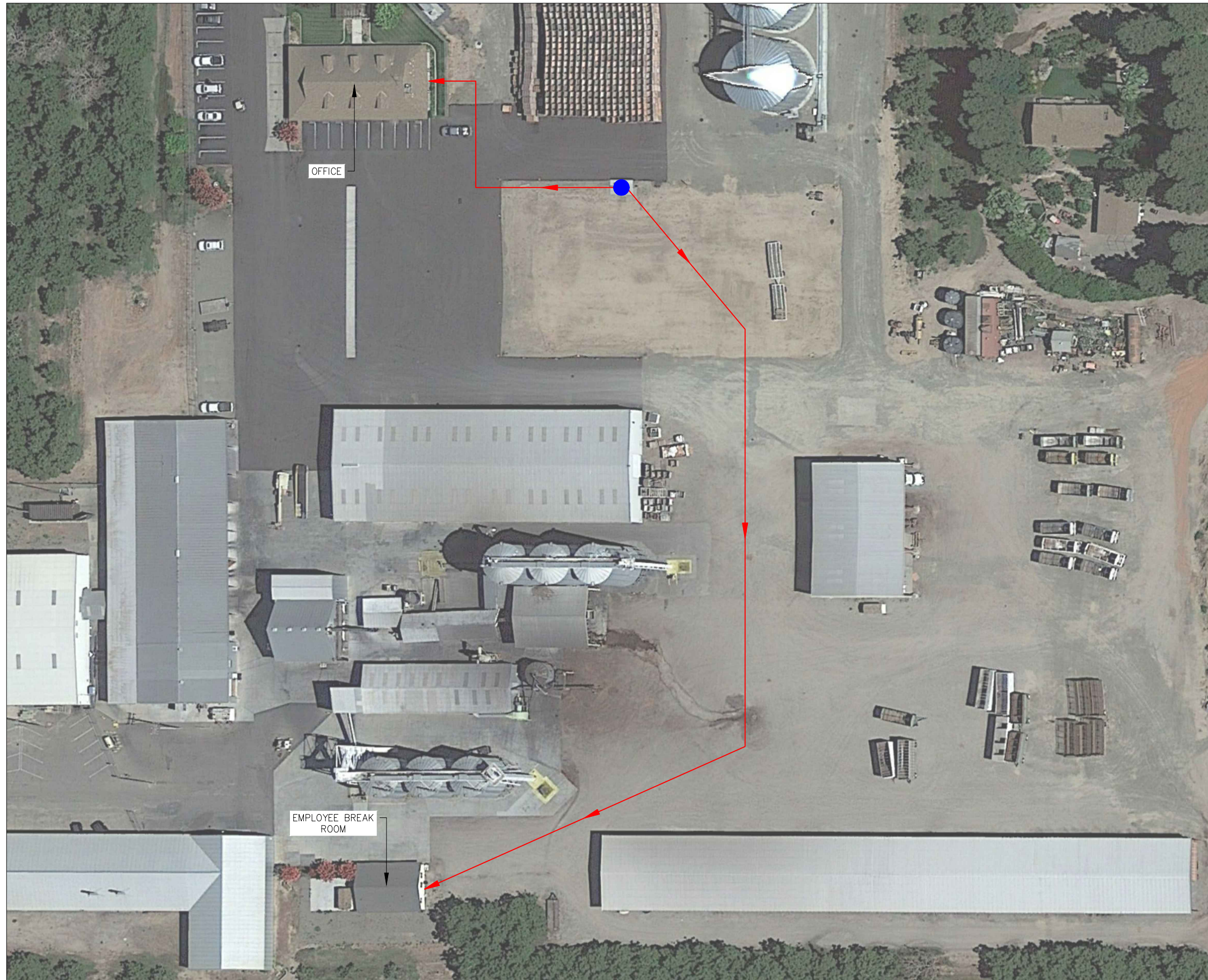


FIGURE 2-1
WELL AND DISTRIBUTION SYSTEM



CHAPTER 3 PROPOSED IMPROVEMENTS

3.1. Treatment System Description

This Section discusses the design and operation of the proposed on-site wellhead treatment system. The proposed treatment system consists of six (6) Culligan Stainless Steel Portable Ion Exchange Tanks filled with SIR-100-HP nitrate reducing resin followed by a chlorination system. Each exchange tank contains approximately one and a half (1.5) cubic feet of SIR-100-HP nitrate reducing resin. After chlorination, the treated effluent will be stored in a 1,500 gallon above ground plastic AWWA approved potable water storage tank equipped with a 25 gpm booster pump.

The treatment system will be equipped with an audible alarm, red flashing strobe light, and high nitrate shut off valve actuated by a Liquiline controller linked to an Endress+Hauser Nitrate Analyzer. All equipment and media contained in this proposal has been tested and certified under NSF/ANSI 61. Water system operators will be trained by the Culligan Water Company on the operation and maintenance for the system. Figure 3-1 displays the process flow diagram of the proposed treatment system.

3.2. SIR-100-HP Nitrate Reducing Resin

SIR-100-HP nitrate reducing resin is a chloride form macroporous nitrate selective strong base anion resin. SIR-100-HP has a unique functionality that increases selectivity for nitrate and decreases selectivity for sulfate. This results in higher operating capacity, lower leakage, and freedom from nitrate dumping if operated past sulfate break. SIR-100-HP is intended for all nitrate removal applications and can also be used to remove perchlorate. SIR-100-HP is supplied in the chloride form.

3.3. Design Parameters

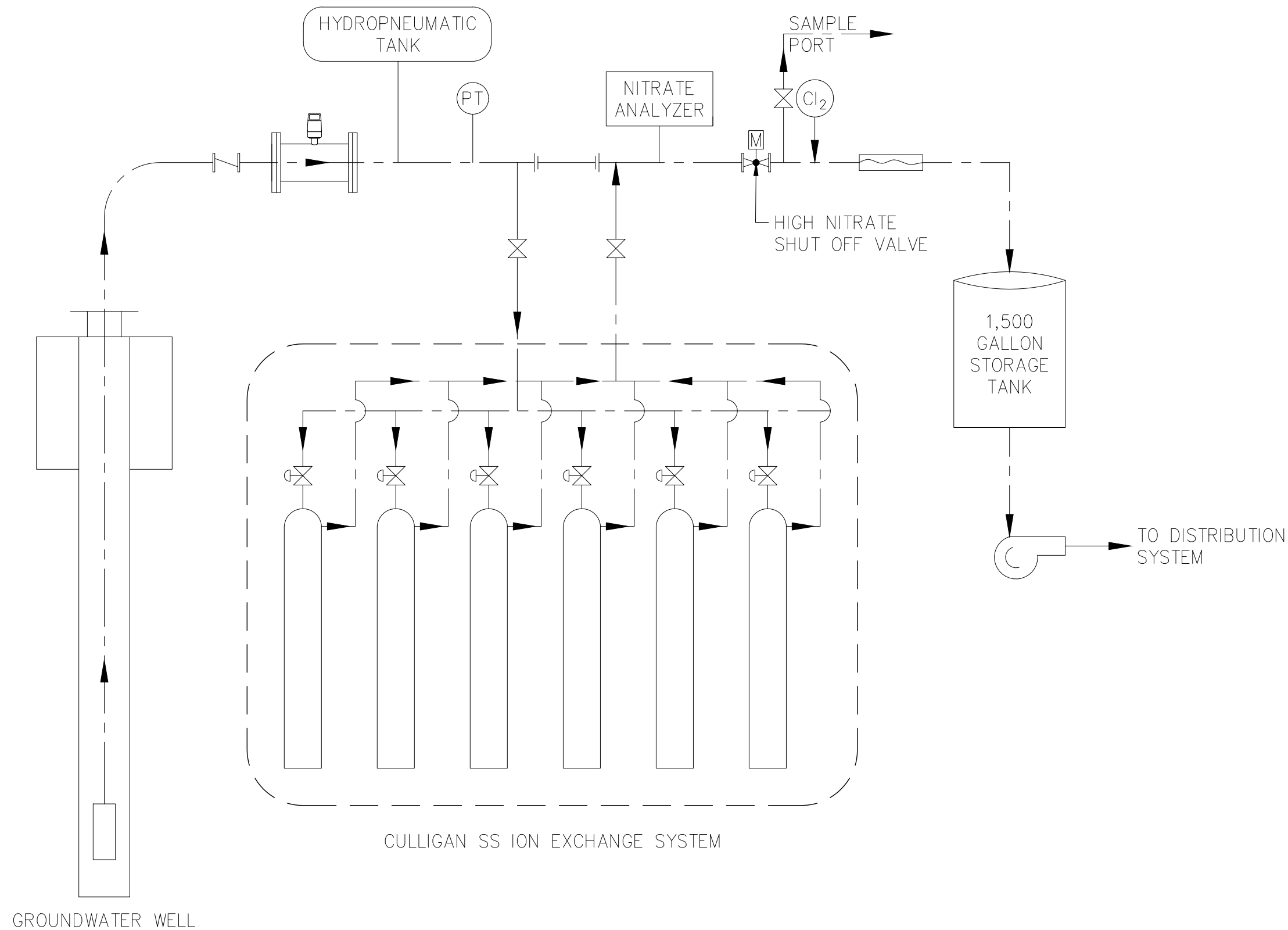
The treatment system was designed using the raw water condition displayed in Table 3-1.

Table 3-1 Design Raw Water Quality

Constituent	Concentration	Units
Nitrate as N	12.7	mg/l
Alkalinity as CaCO ₃	225.47	mg/l
Chloride	22.27	mg/l
Fluoride	<0.20	mg/l
Sulfate	44.44	mg/l
pH	7.7	
Conductivity	646.2	umhos/cm
TDS	446.38	mg/l
Hardness as CaCO ₃	226.61	mg/l
	13.25	gpg

FRAZIER NUT FARMS

WATER SYSTEM IMPROVEMENTS
PUBLIC WATER SYSTEM REPORT



LEGEND

	FLOW METER
	MANUAL VALVE
	PRESSURE TRANSMITTER
	STATIC MIXER
	CHLORINE INJECTION
	FLOW DIRECTION
	CHECK VALVE
	MECHANICAL VALVE
	PRESSURE REGULATING VALVE (3 GPM)
	PIPE SPOOL (USUALLY DISCONNECTED)
	PUMP STATION

FIGURE 3-1
PROCESS FLOW DIAGRAM

The design operating parameters are as follows:

- ❖ Continuous Flow Rate – 15 gallons per minute (gpm)
- ❖ Peak Flow Rate – 18 gpm
- ❖ 1,500 gallons per day (gpd) maximum
- ❖ Eight (8) hours per day run time

3.4. Chloride to Sulfate Mass Ratio

The SIR-100-HP nitrate reducing resin contains chloride anions. During treatment (ion exchange), nitrate anions in the raw water are exchanged for chloride anions. Therefore, reducing the concentration of nitrate will increase the concentration of chloride. According the Culligan, the exchange rate is one to one. Meaning for every one mg/l of nitrate that is removed, one mg/l of chloride is added. Table 3-2 below displays the concentrations of chloride, sulfate and alkalinity before and after treatment.

Table 3-2 Chloride to Sulfate Mass Ratio

Constituent	Raw Water Concentration (mg/l)	Treated Effluent Concentration (mg/l)
Nitrate	12.7	0
Chloride	22.27	34.97
Sulfate	44.44	44.44
Alkalinity as CaCO ₃	225.47	225.47
Chloride-to-Sulfate Mass Ratio	0.50	0.79

The proposed ion exchange treatment system will increase the chloride-to-sulfate Mass ratio (CMSR). Studies on water system supplied by surface water has shown that a CMSR greater than 0.77 increases the potential of lead leaching in the pipes. However, alkalinity provides a buffer and decreases that potential. The alkalinity of the water at Frazier Nut is expected to limit the corrosivity of the water after the ion exchange process. Frazier Nut will collect quarterly samples for Lead and Copper during the first year of operation to confirm that corrosion is not occurring in the system.

3.5. Resin Regeneration Plan

The estimated capacity of the six (6) exchange tanks is approximately 18,000 to 24,000 gallons. The exact volume of water that the six (6) exchange tanks can treat will be confirmed once in operation. The Frazier Nut Farms Water System proposed system will include six (6) exchange tanks in service, and six (6) replacement exchange tanks. The replacement exchange tanks will be installed when the six exchange tanks in service have exhausted their removal capacity and will remain in service until the exhausted exchange tanks are regenerated.

The replacement exchange tanks will be stored at the Culligan Water Company facility until replacement is required. The nitrate monitoring system will alert operators when the Nitrate levels approach the MCL. Before the MCL is exceeded, Frazier Nut Farms will notify the Culligan Water Company and the exchange tanks will be replaced.

The media, SIR-100-HP nitrate reducing resin, can be regenerated by introducing the worn filters to a brine rich environment. The Frazier Nut Farms, Inc. will set up a maintenance plan with the Culligan Water Company. The maintenance plan will require the Culligan Water Company to replace all six (6) exchange

tanks after their useful life has been reached and take all six (6) exhausted exchange tanks back to their facility to be regenerated. This process will continue indefinitely while the treatment system is in operation.

3.6. Operations Plan

3.6.1. Startup and Shut-Down Procedures

The treatment system will operate automatically. The well pump will turn on when the water level in the storage tank reaches a low level and will shut down when the water level reaches a high level. The ion exchange cartridges don't require any operator adjustments.

The ion exchange vessels will be exchanged by a third party and regenerated off site. Upon installation of new cartridges, water will be flushed until the nitrate concentration provided by the inline analyzer has stabilized. The volume of flushed water is expected to be less than 5 gal per month. Flushed water will be captured at an onsite storage tank and disposed offsite at an approved treatment facility. Upon exhaustion of the ion exchange vessels, staff will initiate the exchange process. The removal of the exhausted vessels will be done by a third party. The well will be turned off and isolation valves closed before removal of the exhausted vessels. The vessels will be transported to an outside facility where they will be regenerated and stored until they are reinstalled.

3.6.2. Treatment System Monitoring Schedule

The Culligan nitrate removal ion exchange vessels are estimated to be replaced approximately once a month. The actual frequency will be determined once the system is in operation. Frazier Nut staff will log the treated water nitrate concentration provided by the in-line analyzer daily. Frazier Nut staff will notify Culligan once the nitrate concentration reaches 8 mg/l. It is estimated that that the vessels can be replaced within 48 hours. Over time, Frazier Nut Farms will determine if the nitrate concentration that triggers notification to Culligan needs to be adjusted.

The Culligan ion exchange vessels SIR-100-HP nitrate reducing resin do not last indefinitely. The regeneration of the resin will deteriorate over time. To monitor the deterioration of the resin, annual performance of the resin will be evaluated during their annual reporting to the State Water Resources Control Board – Division of Drinking Water (SWRCB-DDW). Annual reporting includes the gallons treated per year, as well as the number of cartridges used per year. This will reveal the treatment capacity of the Culligan vessels. When the capacity of the vessels has decreased by more than 25%, the vessels will be replaced. The following table provides the daily, monthly, and annual monitoring parameters:

Table 3-3 Monitoring Parameters

	Daily	Monthly	Annually
Flow Totalizer	•		
Pressure Differential	•		
Nitrate Concentration (Analyzer)	•	•	
Nitrate Concentration (Lab)		•	
HPC		•	
Coliform		•	
Cartridge Capacity (Calculation)			•

APPENDIX A
COMPLIANCE ORDER NO. DER-18R-006



DRAFT

DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C, Modesto, CA 95358-9494
Phone: 209.525.6700 Fax: 209.525.6774

March 22, 2018

Frazier Nut Farms, Inc.
c/o Jimmy Frazier
10830 Yosemite Boulevard
Waterford, CA 95386

**RE: TRANSMITTAL OF COMPLIANCE ORDER NO. DER-18R-006 FOR NITRATE MAXIMUM
CONTAMINANT LEVEL VIOLATION**

The Frazier Nut Farms, Inc., Water System has ongoing violations of the Maximum Contamination Level (MCL) for nitrates, as specified in the Domestic Water Quality and Monitoring Regulation, Chapter 15, Title 22, California Code of Regulations. The Stanislaus County Department of Environmental Resources has issued Compliance Order No. DER-18R-006 in response to these violations. A Compliance Order is being transmitted to the Frazier Nut Farms, Inc., Water System under cover of this letter.

Any person who is aggrieved by a compliance order issued by the Stanislaus County Department of Environmental Resources may file a petition with the State Water Resources Control Board (State Water Board) for reconsideration of the compliance order. Petitions must be received by the State Water Board within 30 calendar days of the issuance of the compliance order. The date of issuance is the date when Stanislaus County Department of Environmental Resources mails or serves a copy of the compliance order, whichever occurs first. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day. Petitions must be received by 5:00 p.m. Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

Section 116650(d) and Section 116650(e) of the California Health and Safety Code allow for the assessment of a civil penalty for failure to comply with the requirements of Chapter 4 of the California Safe Drinking Water Act. Stanislaus County Ordinance provides that fees must be charged for staff time in responding to MCL violations. The fee charged is the Department's weighted labor rate of \$111.00 per hour, with a one-hour minimum. To date, 2.0 hours have been spent responding to the MCL violation. This Department will invoice you.

Please respond to each item of the Order by the deadlines established in the compliance order. If you have any questions regarding this matter, please contact Rachel Riess at (209) 525-6720.

Sincerely,

Rachel Riess, REHS
Registered Environmental Health Specialist
Enclosure (1)

STANISLAUS COUNTY
DEPARTMENT OF ENVIRONMENTAL RESOURCES
DIVISION OF ENVIRONMENTAL HEALTH

TO: Frazier Nut Farms, Inc.
10830 Yosemite Boulevard
Waterford, CA 95386

Attn: Jimmy Frazier, Vice President
Frazier Nut Farms, Inc.

COMPLIANCE ORDER NO. DER-18R-006
FOR
VIOLATION OF HEALTH AND SAFETY CODE SECTION 116555 (a) (1)
AND THE PRIMARY DRINKING WATER STANDARD FOR NITRATE
WATER SYSTEM NO. 5000530
Issued on March 22, 2018

The Department of Environmental Resources (hereinafter "Department"), acting by and through its Division of Environmental Health (hereinafter "Division") and the Manager for the Division (hereinafter "Manager"), hereby issues this Compliance Order (hereinafter "Order") pursuant to Sections 116330 (f) and 116650 of the California Health and Safety Code (hereinafter "CHSC") to the Frazier Nut Farms, Inc., Water System (hereinafter, "Frazier") for violation of the CHSC Section

1 116555(a)(1) and Title 22, California Code of Regulations (hereinafter "CCR"),
2 Section 64431.

3 **APPLICABLE AUTHORITIES**

4 **Section 116555(a) (1) of the CHSC states in relevant part:**

5 (a) Any person who owns a public water system shall ensure that the system does
6 all of the following:

7 (1) Complies with primary and secondary drinking water standards.

8 **Section 116655 of the CHSC states in relevant part:**

9 (a) Whenever the Department determines that any person has violated or is
10 violating this chapter, or any permit, regulation, or standard issued or adopted
11 pursuant to this chapter, the director may issue an Order doing any of the following:

12 (1) Directing compliance forthwith.

13 (2) Directing compliance in accordance with a time schedule set by the
14 department.

15 (3) Directing that appropriate preventive action be taken in the case of a
16 threatened violation.

17 (b) An Order issued pursuant to this section may include, but shall not be limited
18 to, any or all of the following requirements:

19 (1) That the existing plant, works, or system be repaired, altered, or added to.

20 (2) That purification or treatment works be installed.

21 (3) That the source of the water supply be changed.

22 (4) That no additional service connection be made to the system.

23 (5) That the water supply, the plant, or the system be monitored.

(6) That a report on the condition and operation of the plant, works, system, or water supply be submitted to the Department.

CCR, Title 22, Section 64431, states in relevant part:

Public water systems shall comply with the primary MCLs in table 64431-A as specified in this article.

**Table 64431-A
Maximum Contaminant Levels
Inorganic Chemicals**

<i>Chemical</i>	<i>Maximum Contaminant Level, mg/L</i>
Aluminum	1.
Antimony	0.006
Arsenic	0.010
Asbestos	7 MFL *
Barium	1.
Beryllium	0.004
Cadmium	0.005
Chromium	0.05
Cyanide	0.15
Fluoride	2.0
Mercury	0.002
Nickel	0.1
Nitrate (as nitrogen)	10.
Nitrate+Nitrite (sum as nitrogen)	10.
Nitrite (as nitrogen)	1.
Perchlorate	0.006
Selenium	0.05
Thallium	0.002

* MFL=million fibers per liter; MCL for fibers exceeding 10 um in length.

CCR Title 22, Section 64432.1, states in relevant part:

(a) To determine compliance with the MCL for nitrate in Table 64431-A, all public water systems using groundwater and transient-noncommunity systems using approved surface water shall monitor annually, and all community and nontransient-noncommunity systems using approved surface water shall monitor quarterly.

(1) The water supplier shall require the laboratory to notify the supplier within 24 hours whenever the level of nitrate in a single sample exceeds the MCL, and shall ensure that a contact person is available to receive such analytical results 24-hours a day. The water supplier shall also require the laboratory to immediately notify the State Board of any acute nitrate MCL exceedance if the laboratory cannot make direct contact with the designated contact person within 24 hours. Within 24 hours of notification, the water supplier shall:

(A) Collect another sample, and

(B) Analyze the new sample; if the average of the two nitrate sample results exceeds the MCL, report the result to the State Board within 24 hours. If the average does not exceed the MCL, inform the State Board of the results within seven days from the receipt of the original analysis.

(C) If a system is unable to resample within 24 hours, it shall notify the consumers by issuing a Tier 1 Public Notice pursuant to section 64463.1 and shall collect and analyze a confirmation sample within two weeks of notification of the results of the first sample.

STATEMENT OF FACTS

Frazier is operated under Water Supply Permit 2013-05-003, which was issued on May 22, 2013.

Frazier's water system is located in Stanislaus County along Highway 132, adjacent to the City of Waterford. Frazier's service area is approximately 64.78 acres in size.

Frazier's water system is classified as a nontransient noncommunity water system that serves the visitors, employees, and residents of a nut processing facility. According to the 2016 report to the Division, Frazier serves approximately 64 visitors and 25 employees and residents through 14 service connections. All of the service connections are un-metered. The water system obtains its water supply from one active well located on Frazier's property at 10830 Yosemite Boulevard, Waterford, CA 95386.

Title 22, CCR, Division 4, Chapter 15, Article 4, establishes primary drinking water standards and monitoring and reporting requirements for inorganic constituents. Nontransient noncommunity water systems must comply with the maximum contaminant level for nitrates of 10 mg/L as N, as established in Title 22 CCR Section 64431.

A sample collected on March 6, 2018, showed nitrate (as N) concentrations over the MCL in water produced by the 2011 Well (PS Code 5000530-004). Therefore, in accordance with Section 64432.1 (a) (1), Frazier was required to collect a confirmation sample within 24 hours and determine if the average exceeded the MCL. The confirmation sample collected on March 9, 2018, showed nitrate concentrations that were again over the MCL. The results of these last samples are as follows in Table 1. All results are as reported to the Division by the laboratory that performed the analysis.

Table 1: Nitrate Monitoring Results 2011 Well as N (in mg/L)

Sample Date	Sample Results	Average
3/6/18	11.0	11
3/9/18	11.3	

Furthermore, it is likely that the 2011 Well will exceed the nitrate MCL this year and be in violation of CHSC, Section 116555 and Section 64442.

DETERMINATION

Based on the above Statement of Facts, the Division has determined that the water system has violated the California Health and Safety Code, Section 116555 and Section 64431, Title 22, CCR, since the water produced by the 2011 Well during March of 2018 exceeded the nitrate MCL, and continues to be in violation through the date of this Order, as shown above in **Table 1**.

DIRECTIVES

Frazier is hereby directed to take the following actions:

1. On or before April 16, 2018, submit a written response to the Division indicating its agreement to comply with the directives of this Order and with the Corrective Action Plan addressed herein.
2. Commencing on the date of service of this Order, provide monthly public notification, in accordance with **Enclosure No. 1**, of Frazier's failure to meet the nitrate MCL during any calendar quarter that exceeds the MCL.
3. Commencing on the date of service of this Order, submit proof of each public notification conducted in compliance with **Directive No. 2**, herein above, within 10 days following each such notification, using the form provided as **Enclosure No. 2**.
4. Commencing on the date of service of this Order, collect quarterly samples for nitrate from the well and ensure that the analytical results are reported to the Division electronically by the analyzing laboratory no later

1 than the 10th day following the month in which the analysis was
2 completed, but no later than the last business day of the month following
3 the close of the calendar quarter.

- 4 5. Prepare for Division review and approval, and prior to implementation, a
5 Corrective Action Plan identifying improvements to the water system
6 designed to correct the water quality problem (violation of the nitrate MCL)
7 and ensure that Frazier delivers water to consumers that meets primary
8 drinking water standards. The plan shall include a time schedule for
9 completion of each of the phases of the project, such as design,
10 construction, and startup, and a date as of which Frazier will be in
11 compliance with the nitrate MCL.
- 12 6. On or before June 25, 2018, present the Corrective Action Plan required
13 under **Directive No. 5**, herein above, to the Division in person at the
14 Division's office located at 3800 Cornucopia Way, Suite C, Modesto, CA
15 95358.
- 16 7. Perform each and every element of the Division's approved Corrective
17 Action Plan according to its time schedule, but no later than February 28,
18 2021.
- 19 8. On or before July 10, 2018, and every three months thereafter, submit a
20 report to the Division using the form provided as **Enclosure No. 3**
21 (enclosed) showing actions taken to comply with the Corrective Action
22 Plan during the previous three months.

9. Not later than April 10, 2021, following the date of compliance with the nitrate MCL, demonstrate to the Division that the water delivered by Frazier complies with the nitrate MCL.

10. Notify the Division in writing no later than five (5) days prior to the deadline for performance of each **Directive**, set forth herein, if Frazier anticipates it will not timely meet such performance deadline.

All submittals required by this Order shall be addressed to:

Rachel Riess, REHS
Department of Environmental Resources
3800 Cornucopia Way, Suite C
Modesto, CA 95358

As used in this Order, the "date of issuance" shall be the date of this Order; and the "date of service" shall be the date this Order was served, personally or by certified mail, to Frazier.

The Division reserves the right to make modifications to this Order and/or to issue further Order(s) as it may deem necessary to protect public health and safety. Modifications may be issued as amendments to this Order and shall become effective upon issuance.

Nothing in this Order relieves Frazier of its obligation to meet the requirements of the California SDWA, or any regulation, standard, permit or Order issued thereunder.

PARTIES BOUND

This Order shall apply to and be binding upon Frazier, its owners, shareholders, officers, directors, agents, employees, contractors, successors, and assignees.

SEVERABILITY

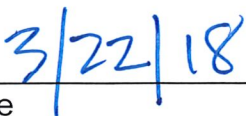
The Directives of this Order are severable, and Frazier shall comply with each and every provision hereof, notwithstanding the effectiveness of any other provision.

FURTHER ENFORCEMENT ACTION

The California SDWA authorizes the Department to: issue a Citation with assessment of administrative penalties to a public water system for violation or continued violation of the requirements of the California SDWA or any regulation, permit, standard, Citation, or Order issued or adopted thereunder including, but not limited to, failure to correct a violation identified in a Citation or Compliance Order. The California SDWA also authorizes the Department to take action to suspend or revoke a permit that has been issued to a public water system if the public water system has violated applicable law or regulations or has failed to comply with an Order of the Department; and to petition the superior court to take various enforcement measures against a public water system that has failed to comply with an Order of the Department. The Board does not waive any further enforcement action by issuance of this Order.



Rachel Riess, REHS



Date

Senior Environmental Health Specialist
Division of Environmental Health
Department of Environmental Resources
Stanislaus County

Certified Mail No. 7014 3490 0001 6849 4439

Enclosures: (1) Public Notification Template w/ Instructions
(2) Proof of Public Notification Form
(3) Quarterly Progress Report

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

DRINKING WATER WARNING

[System] water has high levels of nitrate

DO NOT GIVE THE WATER TO
INFANTS UNDER 6 MONTHS OLD OR PREGNANT WOMEN
OR USE IT TO MAKE INFANT FORMULA

Water sample results received [date] showed nitrate levels of [level and units]. This is above the nitrate standard, or maximum contaminant level (MCL), of 10 milligrams per liter. Nitrate in drinking water is a serious health concern for infants less than six months old.

What should I do?

- **DO NOT GIVE THE WATER TO INFANTS.** *Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.*
- **PREGNANT WOMEN SHOULD NOT CONSUME THE WATER.** *High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.*
- Water, juice, and formula for children under six months of age should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
- **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
- If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What happened? What is being done?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems, storm water run-off, and fertilizers). Levels of nitrate in drinking water can vary throughout the year. We will let you know if the amount of nitrate is again below the limit.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

For more information, please contact [name of contact] at [phone number] or [mailing address].

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Secondary Notification Requirements

Upon receipt of notification from a person operating a public water system, the following notification must be given within 10 days [Health and Safety Code Section 116450(g)]:

- SCHOOLS: Must notify school employees, students, and parents (if the students are minors).
- RESIDENTIAL RENTAL PROPERTY OWNERS OR MANAGERS (including nursing homes and care facilities): Must notify tenants.
- BUSINESS PROPERTY OWNERS, MANAGERS, OR OPERATORS: Must notify employees of businesses located on the property.

This notice is being sent to you by [system].

State Water System ID#: _____. Date distributed: _____.

INFORMACIÓN IMPORTANTE SOBRE SU AGUA POTABLE

Este aviso contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

ADVERTENCIA SOBRE EL AGUA POTABLE

El agua de [System] tiene altos niveles de nitratos
**NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES O A
MUJERES EMBARAZADAS. TAMPOCO USE ÉSTA AGUA
PARA PREPARAR FORMULA INFANTIL**

Los resultados de las pruebas del agua recibidas el [date] mostraron niveles de nitrato de [level and units]. Estos niveles exceden el estándar o nivel máximo de contaminante (MCL) de 10 miligramos por litro. Los nitratos en el agua potable son una preocupación seria en bebés menores de seis meses.

¿Qué debe hacer?

- **NO DE ÉSTA AGUA A BEBÉS MENORES DE 6 MESES.** *Los bebés menores de 6 meses que toman agua con nitrato en exceso del nivel máximo de contaminante (MCL), se pueden enfermar seriamente y rápidamente. Y si los bebés no reciben atención médica, pueden morir debido a que los altos niveles de nitratos pueden interferir con la capacidad de la sangre de los bebés para transportar oxígeno. Los síntomas incluyen falta de aire y coloración azulada de la piel. Los síntomas en los bebés se pueden desarrollar rápidamente y la salud se deteriora en cuestión de días. Si hay síntomas de intoxicación por altos niveles de nitratos, busque atención médica de inmediato.*
- **LAS MUJERES EMBARAZADAS NO DEBEN CONSUMIR AGUA CON ALTOS NIVELES DE NITRATOS.** *Los altos niveles de nitrato también pueden afectar la capacidad de la sangre de mujeres embarazadas para transportar oxígeno.*
- No use agua de la llave para preparar jugo, agua, y formula para bebés menores de 6 meses. Use agua embotellada u otra agua baja en nitratos para los bebés menores de 6 meses hasta nuevo aviso.
- **NO HIERVA EL AGUA.** Hervir, congelar, filtrar, o dejar reposar el agua, no reduce el nivel de nitratos. Hervir el agua en exceso puede causar que los nitratos se concentren más, porque los nitratos se quedan cuando el agua se evapora.
- Si tiene otros problemas de salud por el consumo de ésta agua, usted debería consultar con su doctor.

¿Qué sucedió? ¿Qué se está haciendo al respecto?

DRAFT

El nitrato en el agua potable puede originar de fuentes naturales, industriales, o agrícolas (incluyendo sistemas sépticos, escorrentía de agua de lluvia, y fertilizantes). Los niveles de nitrato en el agua potable pueden variar a través del año. Le informaremos si el nivel de nitratos vuelve a estar debajo del límite.

[Describe corrective action, seasonal fluctuations, and when system expects to return to compliance.]

Para más información, por favor contacte a [name of contact] al [phone number] o [mailing address]

Por favor comparta esta información con todas las demás personas que tomen de esta agua, especialmente aquellos que no hayan recibido éste aviso directamente (por ejemplo, las personas en apartamentos, asilos, escuelas, y negocios). Puede hacerlo poniendo este aviso en un lugar público o distribuyendo copias en persona o por correo.

Requisitos de Notificación Secundaria

Al recibir la notificación de alguien que opere un sistema de agua público, se debe dar la siguiente notificación dentro de 10 días conforme a la Sección 116450(g) del Código de Salud y Seguridad:

- ESCUELAS: Deben notificar a los empleados de la escuela, estudiantes, y a los padres (si los estudiantes son menores).
- DUEÑOS O GERENTES DE PROPIEDAD PARA ALQUILER RESIDENCIAL (incluyendo asilos e instituciones de cuidado): Deben notificar a sus inquilinos.
- DUEÑOS DE PROPIEDAD DE NEGOCIOS, GERENTES, U OPERADORES: Deben notificar a los empleados de los negocios situados en la propiedad.

Este aviso es enviado por [system].

Núm. de Identificación del Sistema Estatal de Agua: _____.

Fecha de distribución: _____.



DRAFT
DEPARTMENT OF ENVIRONMENTAL RESOURCES

3800 Cornucopia Way, Suite C, Modesto, CA 95358-9494
Phone: 209.525.6700 Fax: 209.525.6774

**Drinking Water Notification to Consumers
PROOF OF NOTIFICATION**

Name of System: _____

Please explain what caused the problem if determined and what steps have been taken to correct it.

Consumers Notified _____ **Yes** _____ **No (if no explain)**

Date of Notification: _____

On the date of notification set forth above, I served the above referenced document(s) on the consumers by:

_____ Sending a copy through the U.S. Mail, first class, postage prepaid, addressed to each of the resident(s) at the place where the property is situated, pursuant to the California Civil Code.

_____ Newspaper (if the problem has been corrected).

_____ Personally hand-delivering a copy to each of the consumers.

_____ Posting on a public bulletin board that will be seen by each of the consumers (for small non-community water systems with permission from the Environmental Resources Department)

_____ Other Approved Method: _____

I hereby declare the foregoing to be true and correct.

Dated: _____

Signature of Person Serving Notice

Notice: Complete this Proof of Notification and return it, along with a copy of the water user notification, to the Department of Environmental Resources, 3800 Cornucopia Way Suite C, Modesto, CA 95358, within **7 Days** after notifying water users.

Enclosure No. 2

Quarterly Progress Report

Water System:	Water System No.:
Compliance Order No.:	Violation:
Calendar Quarter:	Date Prepared:

This form should be prepared and signed by Water System personnel with appropriate authority to implement the directives of the Compliance Order and the Corrective Action Plan. Please attach additional sheets as necessary. The quarterly progress report must be submitted by the 10th day of each subsequent quarter, to the Local Primacy Agency Office for Stanislaus County.

Summary of Compliance Plan:

--

Tasks completed in the reporting quarter:

--

Tasks remaining to complete:

--

Anticipate compliance date:

--

--

Name

--

Signature

--

Title

--

Date

APPENDIX B
MARCH 9, 2020 MONITORING REPORT



9399 West Higgins Rd Ste
1100
Rosemont, IL, 60018

Phone: 877-889-8195
Web: www.culligan.com

Report Date: 3/16/2020

CERTIFICATE OF ANALYSIS

Page 1 of 8

ANALYSIS NUMBER: 2002493

Culligan Water Conditioning of Modesto, California
900 Reno Avenue
Modesto, CA 95351

Customer: **Frazier Nut Farms, Inc.**
10830
Waterford CA, 95386

Control Number: 87858

Account Number: 10005019

Collected By: Vince Cheek

Misc:

cc: vcheek@lambertwater.com

SAMPLE INFORMATION:

Analysis Type Requested: Standard A + TOC Analysis

Sampled: 3/9/2020 at 5:30 PM

Supply/Source: Private Well

Condition: Untreated Water

Received: 3/12/2020 at 1:00 PM

Sampling Point: Faucet

Application: Commercial

ANALYSIS INFORMATION:

Turbidity (180.1 Rev. 2 1993):	0.13 NTU	Turbidity after filtration:	NM
Conductivity (120.1):	646.20 microS/cm	Est. TDS by Conductivity:	446.38
Color* (SM2120C, 21Ed):	<5.00 color	Color after Acidification*:	NM
pH* (150.1):	7.7	Tannins:	<2.00 mg/L

Concentrations reported as mg/L (PPM) unless otherwise indicated

CATIONS (Method 200.7 Rev 4.4)

	As Element	As CaCO ₃
Calcium* (Ca)	46.97	117.43
Magnesium* (Mg)	26.50	109.18
Sodium* (Na)	52.66	114.80
Potassium (K)	3.14	4.02
Strontium (Sr)	0.61	
Barium* (Ba) [ppb]	181.59	
Iron* (Fe)	<0.05	
Manganese* (Mn)	<0.02	
Copper* (Cu)	<0.003	
Zinc* (Zn)	<0.05	

ANIONS (Method 300.0)

	As Element	As CaCO ₃
Chloride* (Cl)	22.27	31.40
Nitrate As N* (NO ₃)	12.70	45.34
Nitrite As N* (NO ₂)	<0.10	0.07
Sulfate* (SO ₄)	44.44	46.22
Fluoride* (F)	<0.20	0.39

ANIONS (Method SM3220)

Total Alkalinity*	274.96	225.47
Bicarbonate	274.96	225.47
Carbonate	0.00	0.00

ANIONS (Method 200.7 Rev 4.4)

Silica* (SiO ₂)	58.66
-----------------------------	-------

	Mg/L	GPG		Mg/L	GPG		Mg/L	GPG
Cations (CaCO ₃)	345.43	20.20	Anions (CaCO ₃)	348.89	20.40	Hardness* (CaCO ₃)	226.61	13.25

Additional Tests

Aluminum by ICP*	ND ug/L	Arsenic by ICP (Screen)	ND ug/L
Lead by ICP (Screen)	ND ug/L	TOC*	0.48 mg/L

NA = Not Analyzed NM = Not Measured ND = Not Detected * = NELAP accredited parameter CFU/ml = Colony Forming Unit per Milliliter

This report can only be reproduced in its entirety. The results reported here are representative of the sample as received in the laboratory. Unless noted holding times and temperature requirements for method 300 are not followed. pH results are out of hold time.

NELAP Certifications: IL-100213; PA-68-04623; NY-11756; TX-TX269-2007A

Maria Mozdzen

State Certifications: IL-IDPH-17598; CA-2958; MT-CERT0091; IA-369;

Analytical Lab Manager

VT-02199; WI-105-10119; CO-IL100213; MI-9988; MO-1060

Analysis Number: **2002493**

Consumer:

FEDERAL SAFE DRINKING WATER ACT

All tested parameters exceeding the maximum concentration levels (MCL) established under the "Federal Safe Drinking Water Act"

	<u>Parameter</u>	<u>Found</u>	<u>MCL</u>
PRIMARY:	Nitrate as N	12.70 mg/L	10.00 mg/L

* MCL for Turbidity varies as follows:

1. Municipal Direct Filtration 0.5 NTU
2. Municipal Sand Filtration 1.0 NTU
3. Unfiltered Water Supply 5.0 NTU

TYPICAL POST RO DRINKING WATER UNITS

(Concentrations reported as mg/L (PPM) as the element)

Calcium (Ca)	0.94	Sulfate (SO ₄)	0.89
Iron (Fe)	0.00	Magnesium (Mg)	0.53
Manganese (Mn)	0.00	Sodium (Na)	1.05
Zinc (Zn)	0.00	Potassium (K)	0.09
Copper (Cu)	0.00	Chloride (Cl)	1.11
Nitrate As N (NO ₃)	3.05	Fluoride (F)	0.01
Nitrite As N (NO ₃)	0.00		

These values are typical of new modules on water with a pH of 7-9 at 70-74 F with 500-3000 mg/L total salts operating with 40-70 PSI pressure across the module. Local conditions may yield different results.

DI CALCULATION FACTORS

			GPG	mg/L
Sodium	33.23%	Weak Base Fact X	4.54	77.62
Alkalinity	64.62%	Carbonic Acid	14.50	248.01
Chloride	40.45%	Cation Fact Y	20.20	345.43
Carbonic Acid	56.59%	Silica	48.65	1,003.09
Monovalent Ions	18.34%	Carbon Dioxide	0.66	11.27
Silica	14.02%	Strong Base Fact Z	24.47	418.36

Method	Date	Method	Date
120.1	3/16/2020	150.1	3/16/2020
180.1 Rev. 2 1993	3/16/2020	200.7 R4.4	3/16/2020
300.0 R2.1	3/16/2020	SM 5550	3/16/2020
SM2120C, 21Ed	3/16/2020	SM2120C, 21Ed	3/16/2020
SM2320B, 18Ed	3/16/2020	SM5310C, 19Ed	3/16/2020

pH - the acid strength of water on a scale of 0 to 14 (neutral = pH 7.0). Values from 7→0 are increasingly more acidic; values from 7→14 are increasingly more alkaline. The recommended range for drinking water under the U.S. regulations is 6.5 to 8.5.

Conductivity - the relative ability of water to carry an electrical current, used to estimate the total concentration of dissolved ions.

Turbidity - cloudiness in water caused by the dispersion of light by extremely tiny particles. Measured on an arbitrary scale of Nephelometric Turbidity Units (NTUs). The mandatory maximum under U.S. regulations is 0.5 NTU. Turbidity Filtered is measured through 11 micron filter paper.

Color - the amount of brownish-yellow color from dissolved tannins from vegetation (like tea) and metals (like rust) and their combinations, measured on an arbitrary scale. The recommended maximum under U.S. regulations is 15 CU.

Silica, SiO₂ - a naturally occurring dissolved mineral, which produces a glassy scale in high temperature equipment but is more important in predicting the life of certain water treatment media.

Hydrogen Sulfide, H₂S - a toxic, noxious, corrosive gas that smells like rotten eggs. Bacteria acting on sulfate or organic sulfur-containing materials in the absence of oxygen produce it. Only "special" water analyses can determine hydrogen sulfide levels.

Total Hardness - the sum of all metal ions which react with soap to inhibit sudsing and form "scum" or "bathtub ring" - mostly Calcium and Magnesium. When heated or evaporated, hard water can cause lime scale that can deposit on sink and shower fixtures and walls and result in loss in efficiency or fuel waste in water heaters, boilers, and cooling systems.

Total Alkalinity - the sum of hydroxide (OH⁻), carbonate (CO₃²⁻), and bicarbonate (HCO₃⁻) ions, which can combine with both acids and bases, which act to buffer water and prevent sudden uncontrolled changes in pH.

Cations - ions (atoms or molecules with an electrical charge) with a positive (+) electrical charge, so named because they go toward the cathode in an electric field. Besides the hardness ions, the main cations in water are sodium, Na⁺, and potassium, K⁺.

Anions - ions (atoms or molecules with an electrical charge) with a negative (-) electrical charge, so named because they go toward the anode in an electric field. The main anions in water are hydroxide (OH⁻), carbonate (CO₃²⁻), bicarbonate (HCO₃⁻) (which together comprise "alkalinity"), sulfate (SO₄²⁻), nitrate (NO₃⁻) and chloride (Cl⁻).

Nitrate/Nitrite, NO₃⁻/NO₂⁻ - important because of toxicity to infants, nitrate comes from fertilizers and animal wastes. Water supplies with high nitrate levels should also be screened for agricultural pesticides and bacterial contamination. The mandatory limit under U.S. regulations is 10 mg/L.

Sulfate, SO₄²⁻ - a common mineral component, only rarely occurring at excessive levels, which can cause a temporary diarrhea in visitors who have not become acclimated to it. Recommended U.S. limit, 250 mg/L.

Fluoride, F⁻ - often added to water to inhibit tooth decay. Mandatory U.S. limits range from 4.0 mg/L in northern regions to 1.4 mg/L in southern regions (where more water is consumed).

Chloride, Cl⁻ - a common mineral component, can be found in elevated levels near seawater and other salt supplies, which can cause taste problems and can contribute to corrosion. Recommended U.S. limit, 250 mg/L.

Iron, Fe - cause of metallic taste, rust stains on laundry and porcelain fixtures, and clogging/fouling of equipment. The recommended U.S. limit is 0.3 mg/L.

Manganese, Mn - cause of metallic taste and black stains on laundry and porcelain. Often occurs in combination with iron. The recommended U.S. limit is 0.05 mg/L Mn or a total of 0.3 mg/L of Fe + Mn.

Copper, Cu - cause of green stains on porcelain and fittings, seldom naturally-occurring, usually due to corrosion. The mandatory U.S. "action level" of 1.3 mg/L is tied to the regulation for lead contamination due to corrosion of plumbing materials.

Zinc, Zn - cause of metallic taste and upset stomach. Due to corrosion of galvanized plumbing materials. Recommended U.S. limit, 5.0 mg/L.

DETERMINATION OF POTENTIAL NUISANCE BACTERIA POPULATION (cfu/mL-colony-forming units per milliliter)

	Slime Forming Bacteria	Iron Related Bacteria	Sulfate Reducing Bacteria
Day 1	1,750,000-Aggressive	570,000-Aggressive	2,200,000-Aggressive
Day 2	440,000-Aggressive	140,000-Aggressive	500,000-Aggressive
Day 3	67,000-Aggressive	35,000-Aggressive	115,000-Aggressive
Day 4	13,000-Moderate	9,000-Aggressive	27,000-Aggressive
Day 5	2,500-Moderate	2,200-Moderate	6000-Aggressive
Day 6	500-Moderate	500-Moderate	1400-Moderate
Day 7	100-Not Aggressive	150-Moderate	325-Moderate
Day 8	0-None Present	25-Moderate	75-Moderate
Day 9		8-Not Aggressive	20-Not Aggressive
Day 10		0-None Present	5-Not Aggressive
Day 11			0-None Present

Units of Concentration used in this Report

gpg-abbreviation for "grains per gallon" calculated in terms of calcium carbonate equivalents. Multiply by 17.12 to convert gpg into either ppm or mg/L.

ppm-abbreviation for "parts per million." Interchangeable with mg/L.

mg/L-abbreviation for "milligrams per liter." Interchangeable with ppm. (There are one million milligrams in a liter of pure water).

ppb-abbreviation for "parts per billion." Interchangeable with µg/L or micrograms per liter.

µg/L-abbreviation for "micrograms per liter." Interchangeable with ppb. (There are a billion micrograms in a liter).

1000 ppb = 1 ppm; 1000 µg/L = 1 mg/L

THIS ANALYSIS WILL NOT DETERMINE WHETHER A WATER IS SAFE FOR HUMAN CONSUMPTION

CONTAMINANT	PRODUCT RECOMMENDATION
Alkalinity	Softener
Aluminum	Softener
Ammonia	Deionization, Filtration
Antimony	Ultra Filtration, Reverse Osmosis
Arsenic	Arsenic Filter
Arsenic +3	Arsenic Filter
Arsenic +5	Arsenic Filter
Barium	Softener
Beryllium	Reverse Osmosis, UF, Softener
Bromate	Activated Carbon
Cadmium	Reverse Osmosis, UF, Ion Exchange
Calcium	Softener
Chloride	Ion Exchange
Chromium	Reverse Osmosis
Color	Activated Carbon
Conductivity	Deionization
Copper	Reverse Osmosis, Softener
Fluoride	Reverse Osmosis
Hydrogen Sulfide	Aeration, Chemical Filtration
Iron	Aeration, Filtration
Iron Bacteria	Chlorine, UV, Ultrafiltration
Lead	Carbon Block, Faucet Filter
Magnesium	Softener
Manganese	Softener
Mercury	Carbon Block
Mod Susp Solids	Depth Filter, Particle Filter
Nitrate/Nitrite	Reverse Osmosis
pH	Calcite
Potassium	Softener
Selenium	Reverse Osmosis
Silica	Reverse Osmosis
Silver	Reverse Osmosis, Ion Exchange, Activated Carbon
Slime Forming Bacteria	Chlorine, UV, Ultrafiltration
Sodium	Reverse Osmosis
Solids (TDS, TSS, TS) each	Reverse Osmosis, Deionization
Strontium	No Reliable Treatment
Sulfate	Ion Exchange, Reverse Osmosis
Sulfate Bacteria	Chlorine, UV, Ultrafiltration
Tannins (if color is present)	Carbon Filter
Thallium	Reverse Osmosis, Cation Exchange
TOC	Carbon Filter
Total Coliform	Chlorine, UV, Ultrafiltration
Total Hardness	Softener
Total Phosphate	Particle Filter, Depth Filter, Reverse Osmosis
Uranium	Ion Exchange
Volatile Organic Compound	Carbon Filter
Zinc	Reverse Osmosis, Cation Exchange
<p>Note: The product recommendations listed above are not guaranteed solutions for all applications. The client is solely responsible for proper system selection and application. Not all product recommendation may be used in all states.</p>	



2002493

Control Number: 87858

2858

A+
TOC

SAM
Culligan International Company Analytical Laboratory
9399 W. Higgins Road Suite 1100
Rosemont, IL 60018

SAMPLE SUBMITTED BY:

Account Number: 4410
 Account Name: Lambert Water
 Phone Number: 209-521-7241
 E-MAIL: vcheek@lambertwater.com
 Person Taking Sample: Vince Cheek
 Date Sample Taken: 3-9-20 Time Sample Taken: 5:30 pm

CUSTOMER INFORMATION:

Customer Name: Frazier Nut Farms, Inc.
 Address: 10830
 City: Waterford State: CA Zip: 95386
 Customer reported concern: _____

SAMPLE INFORMATION:

Water Supply: Private ☒ Municipal _____
 Source: Surface _____ Well ☒ Unknown _____
 Condition: Treated _____ Untreated ☒
 Sample Point: Faucet ☒ Equipment _____ Other _____
 Application: Household _____ Commercial ☒ National Account _____
 Comments: _____

ANALYSIS REQUESTED:

Standard Analysis: _____ Scale Analysis: _____
 Standard w/TOC: ☒ Resin Analysis: _____
 Hemodialysis Basic: _____ Depth Filter Analysis: _____
 Hemodialysis Complete: _____ Arsenic Filter _____
 Bacteria: Iron _____ Sulfate _____ Slime _____ VOC _____

Special Analysis: (List Analysis Requested): _____

For Questions contact Rick Cook at (847) 430-1284 or Maria Mozdzen at (847) 430-1219

LAB USE ONLY:

Sample received in acceptable condition: Yes _____ No _____ Received by: _____ Date: _____ Time: _____
 If not reason: _____
 Disposition of sample: _____

Litigation samples are not accepted by the laboratory

Customer: _____ Culligan International Company
 Please Sign: _____ By: _____
 Please print your name: _____ Its: _____



9399 West Higgins Rd Ste 1100
Rosemont, IL, 60018

Phone: 877-889-8195
Web: www.culligan.com

Report Date: 3/16/2020

CERTIFICATE OF ANALYSIS

Analysis Number: 2002493

Culligan Water Conditioning of Modesto, California
900 Reno Avenue
Modesto, CA 95351

Customer: Frazier Nut Farms, Inc.
10830
Waterford CA, 95386

Control Number: 87858
Account Number: 10005019
Collected By: Vince Cheek

Misc:
cc: vcheek@lambertwater.com

SAMPLE INFORMATION:

Analysis Type Requested: Standard A + TOC Analysis

Sampled: 3/9/2020	Supply/Source: Private Well	Condition: Untreated Water
Received: 3/12/2020	Sampling Point: Faucet	Application: Commercial

This Certificate of Analysis compares the actual test result to national standards as defined in the EPA 's Primary and Secondary Drinking Water Regulations .

Primary Standards: Are expressed as the maximum contaminant level (MCL) which is the highest level of contaminant that is allowed in drinking water.
MCLs are enforceable standards.

Secondary Standards: Are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. Some states may choose to adopt that as enforceable standards.

ug/L (ppb): Unless otherwise indicated, results and standards are expressed as an amount in micrograms per liter or parts per billion.

mg/L (ppm): Unless otherwise indicated, results and standards are expressed as an amount in milligrams per liter or parts per million.

Minimum Detection Level (MDL): The lowest concentration level that the laboratory can detect a contaminant.

ND: The contaminant was not detected above the minimum detection level.

NA: The contaminant was not analyzed.

*****: NELAP accredited parameter.

Status

































The contaminant was not detected in the sample above the minimum detection level.




The contaminant was detected below National Standard limit.



The contaminant was detected above National Standard limit.

Status	Contaminant	Results	RDL	Units	Method	EPA Limit	Analysis Date/Time
	Est TDS By Conductivity	446.38		mg/L		500.00	3/13/2020 at 14:26
	Conductivity	646.20		microS/cm	120.1		3/13/2020 at 14:26
	pH*	7.7			150.1	6.50 to 8.50	3/13/2020 at 14:16
	Turbidity	0.13	0.100	NTU	180.1 Rev. 2 1993	0.50	3/13/2020 at 9:11
	Turbidity Filtered	<0.100	0.100	NTU	180.1 Rev. 2 1993	0.50	3/13/2020 at 9:11
	Aluminum by ICP*	<50.000	50.000	ug/L	200.7 R4.4	200.00	3/13/2020 at 12:37
	Arsenic by ICP (Screen)	<10.000	10.000	ug/L	200.7 R4.4	10.00	3/13/2020 at 12:37
	Barium*	181.59	10.000	ug/L	200.7 R4.4	2,000.00	3/13/2020 at 12:37
	Calcium*	46.97	0.100	mg/L	200.7 R4.4		3/13/2020 at 12:40
	Copper (Cu)*	<0.015	0.015	mg/L	200.7 R4.4	1.30	3/13/2020 at 12:37
	Hardness (CaCO3)*	226.61 13.25		mg/L GPG	200.7 R4.4		3/13/2020 at 12:40
	Iron (Fe)*	<0.050	0.050	mg/L	200.7 R4.4	0.30	3/13/2020 at 12:37
	Lead by ICP (Screen)	<15.000	15.000	ug/L	200.7 R4.4	15.00	3/13/2020 at 12:37
	Magnesium*	26.50	0.100	mg/L	200.7 R4.4		3/13/2020 at 12:40
	Manganese (Mn)*	<0.020	0.020	mg/L	200.7 R4.4	0.05	3/13/2020 at 12:37
	Potassium	3.14	0.100	mg/L	200.7 R4.4		3/13/2020 at 12:37
	Silica*	58.66	0.050	mg/L	200.7 R4.4		3/13/2020 at 12:40
	Sodium*	52.66	0.100	mg/L	200.7 R4.4		3/13/2020 at 12:37
	Strontium (Sr)	0.61	0.050	mg/L	200.7 R4.4		3/13/2020 at 12:37
	Zinc (Zn)*	<0.050	0.050	mg/L	200.7 R4.4	5.00	3/13/2020 at 12:37
	Chloride*	22.27	0.500	mg/L	300.0 R2.1	250.00	3/16/2020 at 8:00
	Fluoride*	<0.200	0.200	mg/L	300.0 R2.1	4.00	3/16/2020 at 8:00
	Nitrate as N*	12.70	0.200	mg/L	300.0 R2.1	10.00	3/16/2020 at 8:05
	Nitrite as N*	<0.100	0.100	mg/L	300.0 R2.1	1.00	3/16/2020 at 8:00
	Sulfate*	44.44	3.000	mg/L	300.0 R2.1	250.00	3/16/2020 at 8:00
	Tannins	<2.000	2.000	mg/L	SM 5550		3/13/2020 at 11:05
	Color*	<5.000	5.000	color	SM2120C, 21Ed	15.00	3/13/2020 at 11:10
	Color after Acidification	<5.000	5.000	color	SM2120C,21Ed		3/13/2020 at 11:10
	Bicarbonate	274.96		mg/L	SM2320B, 18Ed		3/13/2020 at 14:26
	Carbonate	0.00		mg/L	SM2320B, 18Ed		3/13/2020 at 14:26
	Total Alkalinity*	274.96		mg/L	SM2320B, 18Ed		3/13/2020 at 14:26

<u>Status</u>	<u>Contaminant</u>	<u>Results</u>	<u>RDL</u>	<u>Units</u>	<u>Method</u>	<u>EPA Limit</u>	<u>Analysis Date/Time</u>
	TOC*	0.48	0.027	mg/L	SM5310C, 19Ed		3/13/2020 at 9:32

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Unless noted holding times and temperature requirements for method 300 are not followed. pH results are out of hold time.

This analysis will not determine whether a water is safe for human consumption.

NELAP Certifications: IL-100213; PA-68-04623; NY-11756; TX-TX269-2007A
State Certifications: IL-IDPH-17598; CA-2958; MT-CERT0091; IA-369;
VT-02199; WI-105-10119; CO-IL100213; MI-9988; MO-1060

Maria Mozdzen
Analytical Lab Manager



APPENDIX C
WELL COMPLETION LOG

DRAFT

TRIPLICATE
Owner's Copy

Page 1 of 1

Owner's Well No. 95386

Date Work Began 7/26/2011 End 8/17/2011

Local Permit Agency Environmental Resources

Permit No. 11-114 Permit Date 7/18/2011

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. **0947592**

DWR USE ONLY - DO NOT FILL IN	
STATE WELL NO./STATION NO.	
LATITUDE	LONGITUDE
APN/RS/OTHER	

GEOLOGIC LOG			WELL OWNER	
ORIENTATION (°)	✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)	DRILLING METHOD ROTARY	Name Frazier Nut Farms	
DEPTH FROM SURFACE	FL to FL	DESCRIPTION	Mailing Address 10830 Yosemite Blvd.	
		Describe material, grain, size, color, etc.	City Waterford CA 95386	
0	3	Top Soil	Address 10830 Yosemite Blvd.	
3	7	Sand	City Waterford CA	
7	10	Hard Pan	County Stanislaus	
10	12	Sand	APN Book _____ Page _____ Parcel _____	
12	24	Clay	Township _____ Range _____ Section _____	
24	47	Sand	Latitude _____ Longitude _____	
47	54	Clay	DEG. MIN. SEC. NORTH	
54	60	Sand	LOCATION SKETCH	
60	85	Clay	ACTIVITY (✓)	
85	94	Sand	NEW WELL	
94	108	Clay	MODIFICATION/REPAIR	
108	115	Gravel	Deepen	
115	126	Clay	Other (Specify)	
126	130	Gravel	DESTROY (Describe Procedure and Materials Under GEOLOGIC LOG)	
130	133	Clay	PLANNED USES (✓)	
133	136	Gravel	WATER SUPPLY	
136	138	Clay	Domestic	
138	147	Gravel	Public	
147	153	Clay	Industrial	
153	163	Blue Clay	MONITORING	
163	164	Blue Sand	TEST WELL	
164	166	Blue Clay	CATHODIC PROTECTION	
166	170	Blue Sand	HEAT EXCHANGE	
170	177	Blue Clay	DIRECT PUSH	
177	178	Blue Sand	INJECTION	
178	220	Blue Clay	VAPOR EXTRACTION	
			SPARING	
			REMEDIATION	
			OTHER (SPECIFY)	
			SOUTH	
			Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional pages if necessary. PLEASE BE ACCURATE & COMPLETE.	
			WATER LEVEL & YIELD OF COMPLETED WELL	
			DEPTH TO FIRST WATER — (FL) BELOW SURFACE 1	
			DEPTH OF STATIC WATER LEVEL 84 — (FL) & DATE MEASURED 7/27/2011	
			ESTIMATED YIELD — (GPM) & TEST TYPE	
			TEST LENGTH — (Hrs) TOTAL DRAWDOWN — (FL)	
			May not be representative of a well's long-term yield.	

DEPTH FROM SURFACE		BORE-HOLE DIA. (Inches)	CASING (S)				DEPTH FROM SURFACE		ANNULAR MATERIAL				
FL	to FL		TYPE (✓)	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)	FL	to FL	CE-MENT	BEN-TOHITE	FILL	FILTER PACK (TYPE/SIZE)
0	140	13 1/2	✓	PLASTIC	8	200	.045	0	78	✓	✓	✓	
140	160		✓					78	160				GRAVEL

ATTACHMENTS (✓)

- Geologic Log
- Well Construction Diagram
- Geophysical Log(s)
- Soil/Water Chemical Analysis
- Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME **MASSELL'S DRILLING INC.**
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

119 Albers Rd. Modesto, CA 95357
ADDRESS CITY STATE ZIP

Signed *[Signature]* WELL DRILLER/AUTHORIZED REPRESENTATIVE

DATE SIGNED **08/17/11** 668622 C-67 LICENSE NUMBER

DWR 153 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM