

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista, Suite 101
San Luis Obispo, California 93401**

**WASTE DISCHARGE AND WATER RECYCLING REQUIREMENTS
ORDER NO. R3-2004-0154**

Waste Discharger Identification No. 3 401023001

For

**FIERO LANE WATER COMPANY
SAN LUIS OBISPO COUNTY**

The California Regional Water Quality Control Board, Central Coast Region, (hereafter Regional Board), finds:

FACILITY OWNER AND LOCATION

1. Fiero Lane Water Company, Inc. (hereafter Discharger or Producer), PO Box 14704, San Luis Obispo, California 93401, owns and operates a wastewater treatment and disposal facility located on Fiero Lane, just outside the southern limits of the City of San Luis Obispo, as shown in Attachment A. The facility serves several existing and planned commercial developments in the unincorporated area surrounding the facility.

PURPOSE OF ORDER

2. On July 21, 2004, the Discharger requested permission to expand their secondary treatment facility capacity from 15,000 gallons per day (gpd) capacity to 25,000 gpd to serve the planned Morabito-Burke commercial development; add a tertiary treatment process at to recycle a portion of the secondary-treated wastewater flow; and allow spray irrigation of landscaping with recycled water at the Morabito-Burke and Senn-Glick developments.

FACILITY DESCRIPTION

3. **Existing Facilities** – The existing secondary treatment facility is a 15,000-gpd capacity extended aeration package treatment plant with chlorine disinfection. Approximately 7,000 gpd is currently disposed to three disposal areas: (1) Disposal Area No. 1 – a 2.0 acre subsurface drip irrigation system, (2)

Disposal Area No. 2 – a 0.5 acre area that will be used in the future for irrigation and/or subsurface disposal; and (3) a 1.2 million gallon lined storage pond. These facilities are shown in Attachment B. Treated wastewater is periodically taken from the storage pond by tanker truck and used for soil compaction and dust control at local construction sites.

4. **Proposed Facilities** – Wastewater from the planned Morabito-Burke and Senn-Glick developments will be transmitted by gravity collection system and force main approximately 0.5 mile northwest along Highway 227 to the existing treatment facility. A second extended aeration package plant will be added to increase the capacity of the secondary treatment process to 25,000 gpd to accommodate this additional wastewater flow. A portion of the secondary treated wastewater flow will be transmitted by force main back to the Morabito-Burke development, where it will undergo tertiary treatment. Tertiary treatment will include coagulation, a Westech Technasand Upflow Sand Filter or equivalent, and chlorine contact. The tertiary treatment process is designed to produce at least 13,000 gpd of Title 22 Tertiary 2.2 quality recycled water. Recycled water will be used to spray irrigate approximately 32.5 acres of landscaping at the Morabito-Burke and Senn-Glick developments. The recycled water system will include a 2.76 acre-foot lined storage pond with 90-days of storage capacity for periods of wet weather. A treatment process flow diagram is shown in Attachment

- C. The location of these facilities and recycled water use areas is shown in Attachment B.
5. The Morabito-Burke and Senn-Glick gravity collection systems will be designed according to City of San Luis Obispo specifications to facilitate future annexation and connection to the City's wastewater facilities.
 6. **Hydrogeology** – All disposal areas are located on nearly level topography consisting of silty clay soils with poor percolation. Depth to groundwater is 10 to 20 feet in the vicinity of the Disposal Area No. 1, 15 to 25 feet in the vicinity of Disposal Area No. 2, and approximately 15 feet at the recycled water use area.
 7. The Discharger's water supply is groundwater from onsite wells (Nos. 1, 2, 3, and 4) as shown on Attachment B. Well Nos. 1 and 4 are representative of groundwater downgradient of wastewater disposal areas.

BASIN PLAN

8. The Water Quality Control Plan, Central Coastal Basin, (Basin Plan) was adopted by the Board on November 17, 1989 and approved by the State Board on August 16, 1990. The Board approved amendments to the Basin Plan on February 11, 1994 and September 8, 1994. The Basin Plan incorporates statewide plans and policies by reference and contains a strategy for protecting beneficial uses of State waters.
9. Present and anticipated beneficial uses of groundwater in the vicinity of the discharge include:
 - a. Domestic Supply;
 - b. Industrial Supply, and
 - c. Agricultural Supply.
10. The nearest surface water body to this discharge is the East branch of the San Luis Obispo Creek, approximately 700 feet to the north of Disposal Area No. 2. Present and anticipated beneficial uses of San Luis Obispo Creek are:
 - a. Municipal and domestic supply;
 - b. Ground water recharge;
 - c. Body contact and non-contact recreation;
 - d. Wildlife habitat;
 - e. Warm freshwater habitat;
 - f. Spawning, reproduction and/or early development;
 - g. Rare, threatened, or endangered species;
 - h. Freshwater replenishment; and
 - i. Sportfishing.

MONITORING PROGRAM

11. Monitoring and Reporting Program (MRP) No. R3-2004-0154 is a part of the proposed Order. The MRP requires routine monitoring of water supply, influent, secondary treatment process effluent, tertiary treatment process effluent, disposal areas, and recycled water use areas to verify compliance with this order and protection of water quality.

CEQA

12. Waste Discharge and Water Recycling Requirements for this discharge are exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et. seq.) in accordance with Section 13389 of the California Water Code.

EXISTING ORDERS AND GENERAL FINDINGS

13. State Department of Health Services' criteria for production and use of recycled water is contained in Title 22, Division 4, Chapter 3, of the California Code of Regulations. The Regional Board has consulted with the State Department of Health Services regarding the regulation of this discharge.
14. The discharge was previously regulated by Waste Discharge/Water Reclamation Requirements Order No. R3-2003-039, adopted by the Regional Board on October 24, 2003.
15. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate any potential adverse changes in water quality due to the discharge.

16. On September 20, 2004, the Board notified the Discharger and interested agencies and persons of its intent to revise waste discharge requirements for the discharge and has provided them with a copy of the proposed order and an opportunity to submit written views and comments.
17. After considering all comments pertaining to this discharge during a public hearing on December 3, 2004, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 and 13523 of the California Water Code, Fiero Lane Water Company, Inc., its agents, successors, and assigns, may discharge waste at the afore-described facilities, providing compliance is maintained with the following:

All technical and monitoring reports submitted pursuant to this Order are required pursuant to Section 13267 of the California Water Code. Failure to submit reports in accordance with schedules established by this Order, attachments to this Order, or failure to submit a report of sufficient technical quality to be acceptable to the Executive Officer, may subject the discharger to enforcement action pursuant to Section 13268 of the California Water Code. The Regional Board will base all enforcement actions on the date of Order adoption.

(Note: other prohibitions and conditions, definitions, and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984.)

A. PROHIBITIONS

1. Discharge to areas other than the designated discharge areas or recycled areas shown in Attachment B or described above is prohibited.
2. Discharge of any wastes, including overflow, bypass, and seepage from transport, treatment, or disposal systems, to adjacent drainage ways, or adjacent properties is prohibited.
3. Bypass of the treatment facilities and discharge of untreated or partially treated wastes is prohibited.

4. Discharge of any waste other than domestic wastewater to the treatment and disposal system is prohibited.

B. SECONDARY-23 EFFLUENT LIMITATIONS

1. Effluent flow from the secondary treatment process shall not exceed 15,000 gallons per day (gpd). After expansion of the secondary treatment process, effluent flow shall not exceed 25,000 gpd.
2. Effluent from the secondary treatment process shall not exceed the following limitations:

| Constituent | Unit | Monthly (30-Day) Average | Maximum |
|------------------------|------|--------------------------|---------|
| Settleable Solids | mL/L | -- | 0.1 |
| Total Dissolved Solids | mg/L | 1,450 | 1,800 |
| Total Suspended Solids | mg/L | 10 ² | 30 |
| Turbidity | NTU | 10 | -- |

3. Effluent from the secondary treatment process shall not have a pH less than 6.5 or greater than 8.4.
4. The median concentration of total coliform bacteria in effluent from the secondary treatment process shall not exceed a Most Probable Number (MPN) of 23 per 100 mL, utilizing the bacteriological results of the last seven days for which analyses have been completed. Total coliform bacteria shall not exceed 240 per 100 mL in more than one sample in any 30-day period. This limitation does not apply to effluent that is discharged to subsurface disposal areas.

² Compliance shall be determined from the results of the five most recent samples.

C. SECONDARY-23 RECYCLED WATER USE SPECIFICATIONS

1. The User of Secondary-23 recycled water shall ensure that recycled water is used at construction sites for dust control or soil compaction in accordance with the following requirements:
2. The Producer or User shall notify the Regional Board in writing at least 14 days prior to use of Secondary-23 recycled water. The notification will include a detailed description of the planned operation and a map of the site.
3. User shall instruct, orally and in writing, each recycled water tank truck driver as to the requirements of this Order and the potential health hazards involved with the use of recycled water.
4. The User shall ensure that tank trucks and other equipment which contain or contact recycled water are clearly identified with warning signs which state, for example, "RECYCLED WATER: DO NOT DRINK".
5. Recycled water shall be confined to the authorized use area.
6. Recycled water shall be applied so as to ensure that no ponding or runoff occurs.
7. Recycled water shall be applied so as to minimize aerosol formation during spraying.
8. Recycled water shall be applied so as to prevent public or employee contact with the water.
9. The User shall ensure that recycled water cannot be introduced into any permanent piping system, and that no connection can be made between the tank truck and any part of a domestic water system.
10. The User shall ensure that recycled water use areas are posted with signs informing the site personnel that recycled water is in use.
11. All trucks used to haul recycled water must have water tight valves and fittings, must not leak, must be clean of other contaminants before being used to haul recycled water, cannot be used to haul water for potable uses, and cannot be connected to potable water supply systems.

D. TERTIARY-2.2 EFFLUENT LIMITATIONS

1. All Tertiary 2.2 recycled water produced shall conform to recycled water criteria contained in Title 22, Division 4, Chapter 3, of the California Code of Regulations.
2. Tertiary treatment process effluent turbidity shall not exceed an average of 2 NTU within a 24-hour period; 5 NTU more than 5 percent of the time within a 24-hour period; or 10 NTU at any time.
3. The median concentration of total coliform bacteria measured in the disinfected effluent shall not exceed 2.2 MPN per 100 mL, utilizing the bacteriological results of the last seven days for which analyses have been completed. Total coliform bacteria shall not exceed 23 MPN per 100 mL in more than one sample in any 30-day period. No total coliform bacteria sample shall exceed 240 MPN per 100 mL.

E. TERTIARY-2.2 RECYCLED WATER USE SPECIFICATIONS

1. Use of recycled water shall be conform to recycled water criteria contained in Title 22, Division 4, Chapter 3, of the California Code of Regulations.
2. Recycled water shall be confined within the designated recycled water use area shown in Attachment B.
3. Recycled water shall not be used for irrigation during periods of extended rainfall and/or runoff.
4. Recycled water shall not be applied, or impounded, within 50 feet of any domestic water supply well.
5. Personnel involved in producing, transporting, or using recycled water shall be informed of possible health hazards that may result from contact and use of recycled water.
6. Use of recycled water shall occur at a time and in a manner to prevent or minimize public contact with effluent.
7. Discharger shall operate the recycled water system to minimize ponding or puddling in the

irrigated area.

8. Discharger employees shall be informed of possible hazards associated with contact or use of recycled water.
9. All irrigation system valves shall be of a design such that the public cannot open them and take water from the system.
10. Drinking water fountains shall be protected against contact with recycled water spray, mist, or runoff.
11. Recycled water spray, mist, or runoff shall not enter dwellings, designated outdoor eating areas, or food handling facilities.
12. Valves in the recycled water irrigation system shall be designed and constructed so unauthorized persons cannot open them.
13. Proper backflow and cross-connection protection for domestic water services and irrigation wells shall be provided.
14. Hose bibbs or other types of hose connections installed in the recycled water irrigation system shall be of different sizes or have other measures incorporated to preclude interchange of hoses between fresh and recycled water-irrigation systems.
15. All recycled water reservoirs and other areas with public access shall be posted (in English and Spanish) with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "RECYCLED WATER – DO NOT DRINK". Each sign shall display an international symbol similar to that shown below.



The Executive Officer may accept alternative signage and wording, or an educational program, provided the User demonstrates to the Executive Officer that the alternative approach will assure an equivalent degree of public notification.

16. Recycled water systems shall be properly labeled and regularly inspected to assure proper operation, absence of leaks, and absence of illegal connections.
17. The incidental discharge of recycled water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceedances of an applicable water quality objective in the receiving water.

F. DESIGN AND OPERATION SPECIFICATIONS

1. New gravity collection system mains, secondary treated wastewater force mains, and recycled water distribution mains shall be metal-taped to allow them to be easily located prior to future excavations near the pipeline corridors.
2. The tertiary treatment facilities shall comply with the General Requirements of Design and Reliability Requirements, as found in Title 22, Division 4, Chapter 3, Articles 8 and 10, of the California Code of Regulations. This includes alarm devices, standby power supply, and other reliability features.
3. The tertiary treatment facilities shall include coagulant addition ahead of the filter; with adequate detention following coagulant addition to ensure that flocculation occurs prior to filtration.
4. Filter loading rate shall not exceed 5 gallons per minute per square foot of surface area.
5. Filter media shall be maintained at a depth of at least 40 inches of sand with an effective size of 1.3 millimeters or less and a uniformity coefficient of approximately 1.5.
6. Filter media shall be completely recycled no less frequently than every 4 hours of filter operation.

7. Tertiary effluent shall be subject to a chlorine disinfection process that provides a CT (chlorine concentration times modal contact time) value of not less than 450 milligram-minutes per liter at all times, with a modal contact time of at least 90 minutes, based on peak dry weather design flow.
 8. A State-Certified Operator of at least Grade III shall oversee facility operations.
 9. Surface drainage shall be excluded from storage ponds and subsurface disposal areas.
 10. The subsurface disposal areas shall be managed to prevent rainwater or surface water from ponding thereon.
 11. Freeboard in the recycled water storage ponds shall be greater than two feet at all times.
 12. The subsurface discharge areas shall be maintained at least 100 feet from any water well and 100 feet from any drainage way.
 13. Solids generated by the treatment process shall be disposed of at a facility approved by the Executive Officer.
2. The Fiero Lane Water Company Board supports the concept of annexation to the City of San Luis Obispo when such a connection becomes available and the City completes its Environmental and Annexation studies. At such time, the Fiero Lane Water Company, in consultation with the City and Regional Board staff, will evaluate and provide its determination towards the financial viability of annexation and hookup to the City's collection system. The Discharger shall provide the Regional Board with a written update on City activities relating to annexation with the annual reports due on January 30th of each year.
 3. Discharger shall submit written verification, including acknowledgment from the City of San Luis Obispo, that the new gravity collection systems for the Morabito-Burke and Senn-Glick developments are designed according to City of San Luis Obispo specifications, **at least 30 days prior to commencement of construction of the collection systems.**
 4. Order No. R3-2003-039, "Waste Discharge/Water Reclamation Requirements for Fiero Lane Water Company, San Luis Obispo County," adopted by the Board on October 24, 2003, is hereby rescinded.
 5. Discharger shall comply with "Monitoring and Reporting Program No. R3-2004-0154," as specified by the Executive Officer.
 6. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984.
 7. Wastewater storage shall be provided as necessary to comply with this Order.

G. GROUNDWATER LIMITATIONS

1. The discharge shall not cause nitrate concentrations in the groundwater downgradient of the disposal area to exceed 8 mg/L (as N).
2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying groundwaters.
3. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations.

H. PROVISIONS

1. Discharger shall submit an engineering report by **December 3, 2005** that demonstrates facility compliance with General Requirements of Design and Reliability Requirements, as found in Title 22, Division 4, Chapter 3, Articles 8 and 10, of the California Code of Regulations.

8. Pursuant to Title 23, Chapter 3, Subchapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than **June 3, 2009**, addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - b. Whether, in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise in need of revision.

I, **Roger W. Briggs, Executive Officer**, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on December 3, 2004.

Executive Officer



Cerro San Luis Obispo
EL. 1292

SAN LUIS OBISPO

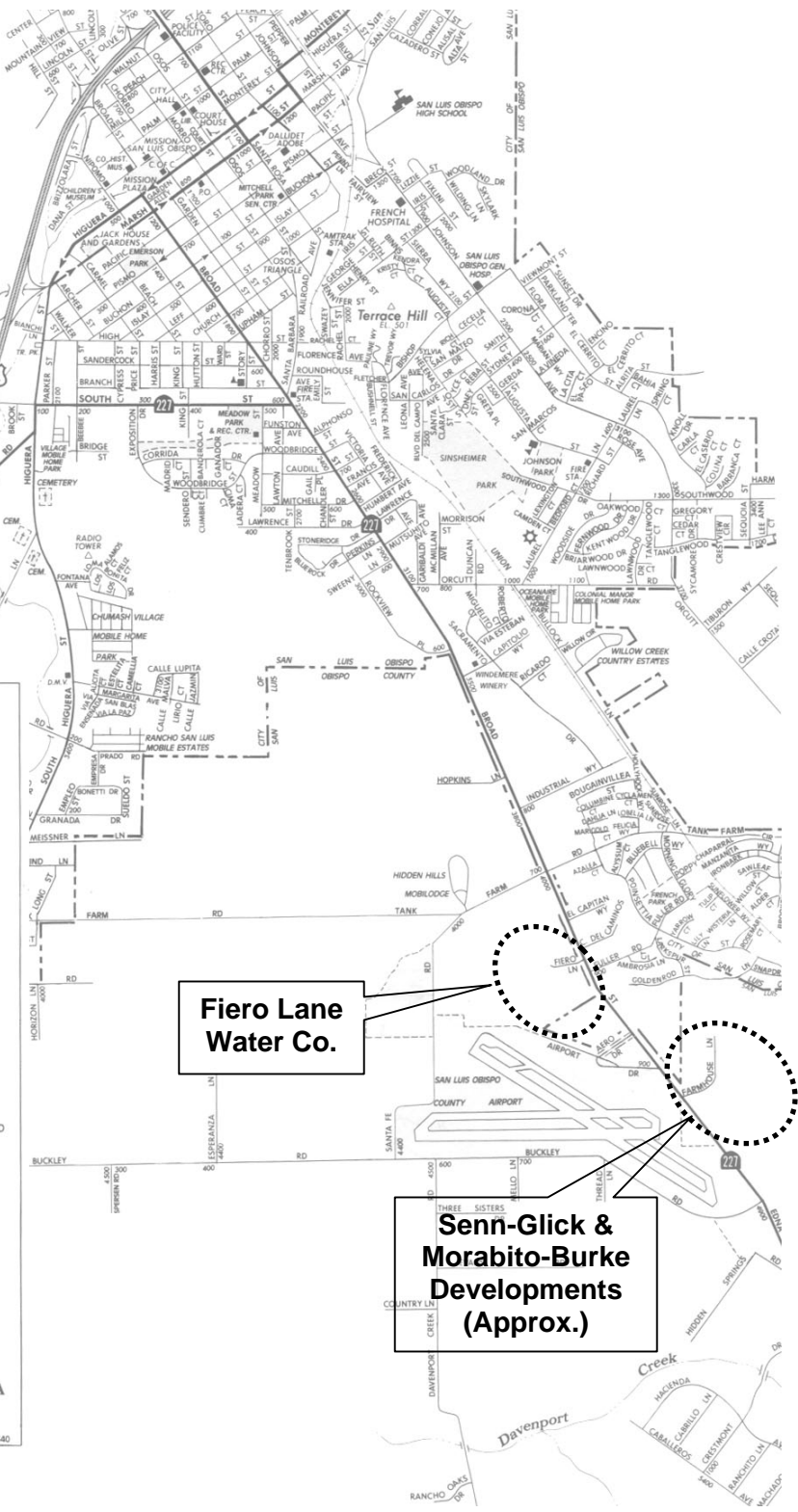
SAN LUIS OBISPO

LEGEND

- | | | | |
|--|---------------------------------------|--|--|
| | FREEWAY | | ELEMENTARY SCHOOL |
| | FREEWAY UNDER CONSTRUCTION | | BLOCK NUMBERS READ PARALLEL TO STREET |
| | INTERSTATE HIGHWAY | | CALIFORNIA HIGHWAY PATROL OFFICE |
| | U.S. HIGHWAY | | LOCKED GATE |
| | CALIFORNIA STATE HIGHWAY | | SAN LUIS OBISPO INCORPORATED CITY |
| | COUNTY HIGHWAY | | Avila Beach DISTRICT OR UNINCORPORATED COMMUNITY |
| | STATE SCENIC HIGHWAY | | AUTOMOBILE CLUB OF SOUTHERN CALIFORNIA OFFICE |
| | SEE EXPLANATION AT BEGINNING OF INDEX | | |
-
- ### RECREATION
- | | | | |
|--|----------------------------------|--|-------------------------------|
| | PARK/PLAYGROUND | | IMPROVED CAMPGROUND |
| | PUBLIC GOLF COURSE | | UNIMPROVED CAMPGROUND |
| | PRIVATE/SEMI-PRIVATE GOLF COURSE | | PRIVATELY OPERATED CAMPGROUND |
| | PUBLIC SWIMMING BEACH | | BOAT RENTAL AND LAUNCHING |
| | AUTO RACETRACK/ DRAC STRIP | | BOAT RENTAL ONLY |
| | OFF-HIGHWAY VEHICLE AREA | | BOAT LAUNCHING ONLY |
| | PUBLIC SHOOTING RANGE | | COMMERCIAL FISHING POND |
| | | | DEEP SEA SPORTFISHING LANDING |
| | | | SURFING AREA |

SCALE IN MILES
0 0.5 1

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MAP 2340

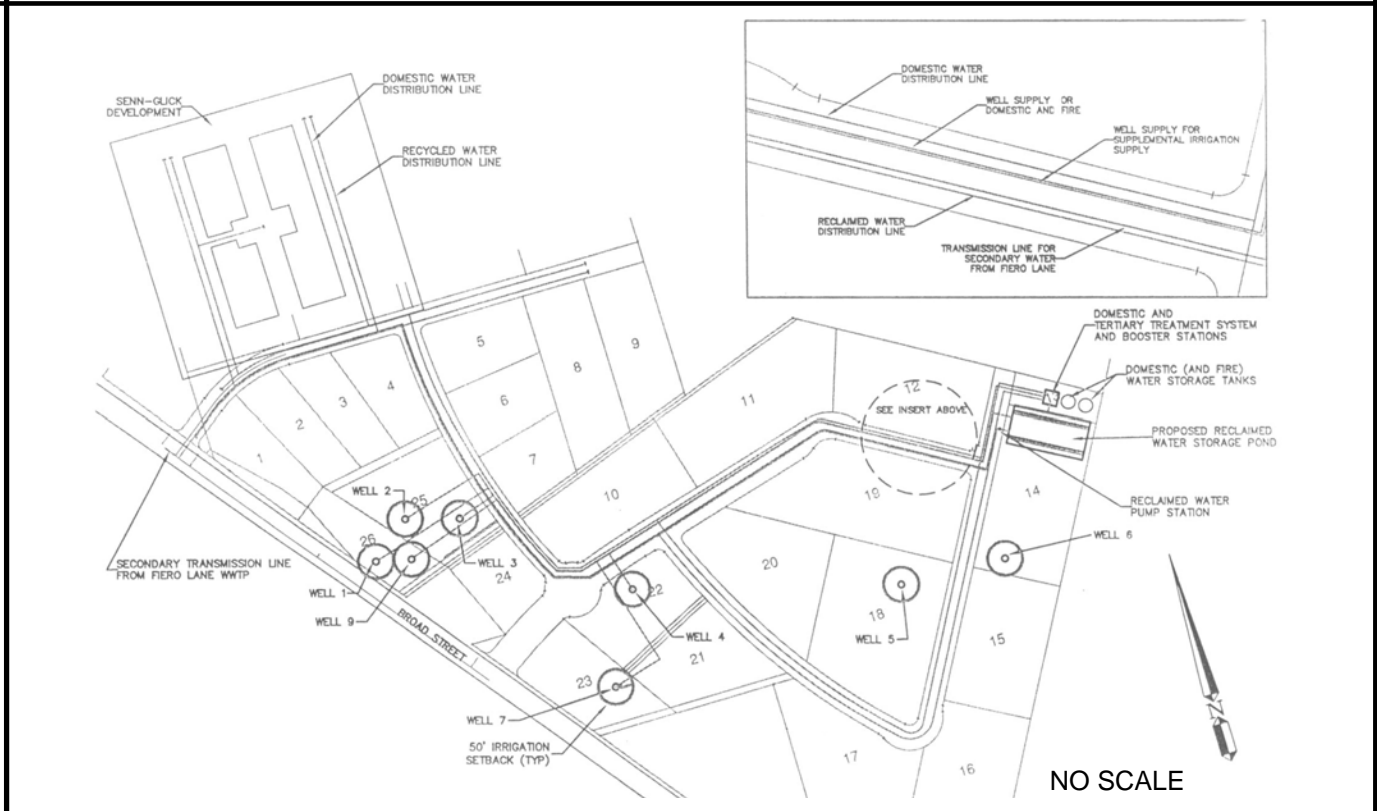
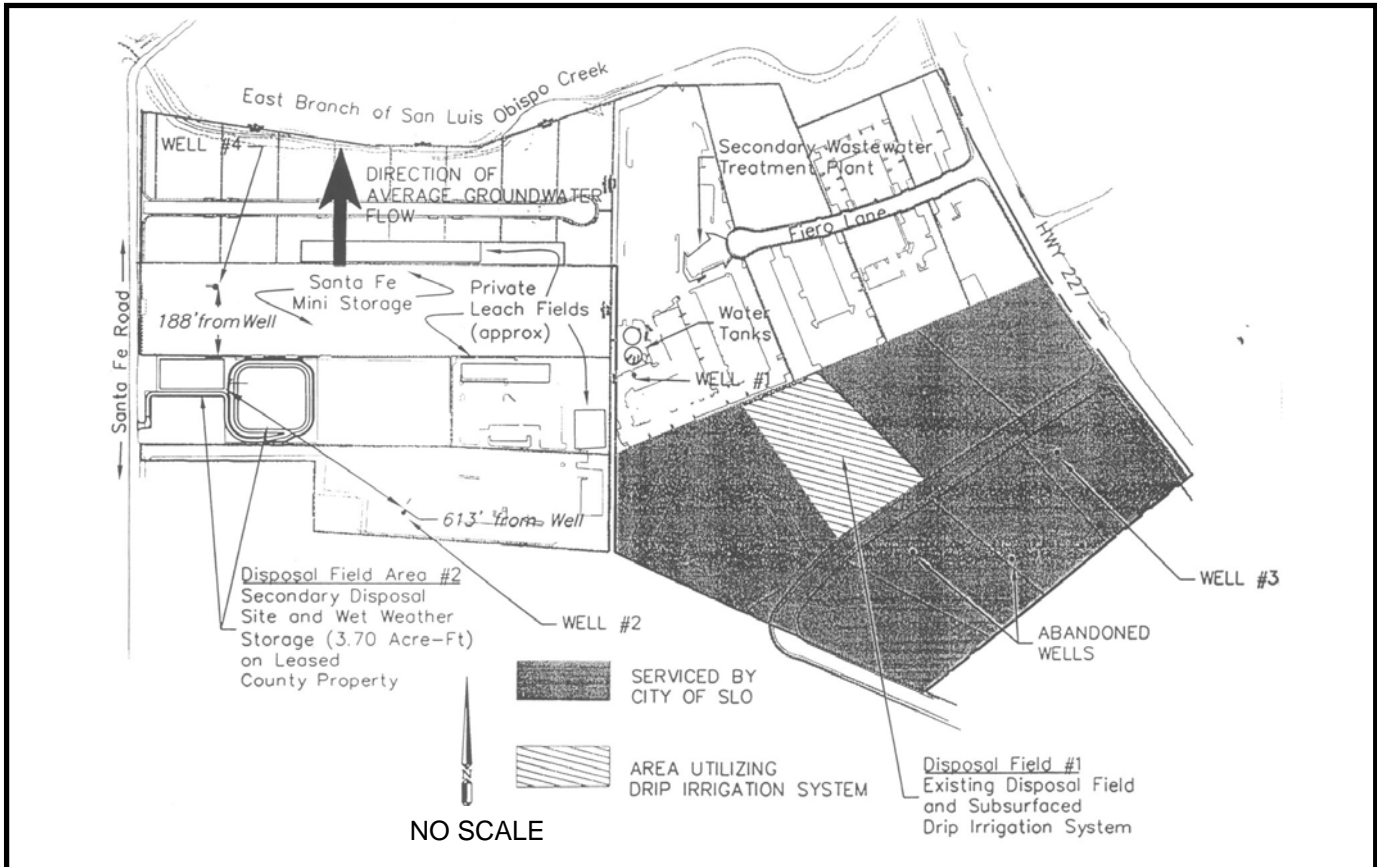


**Fiero Lane
Water Co.**

**Senn-Glick &
Morabito-Burke
Developments
(Approx.)**

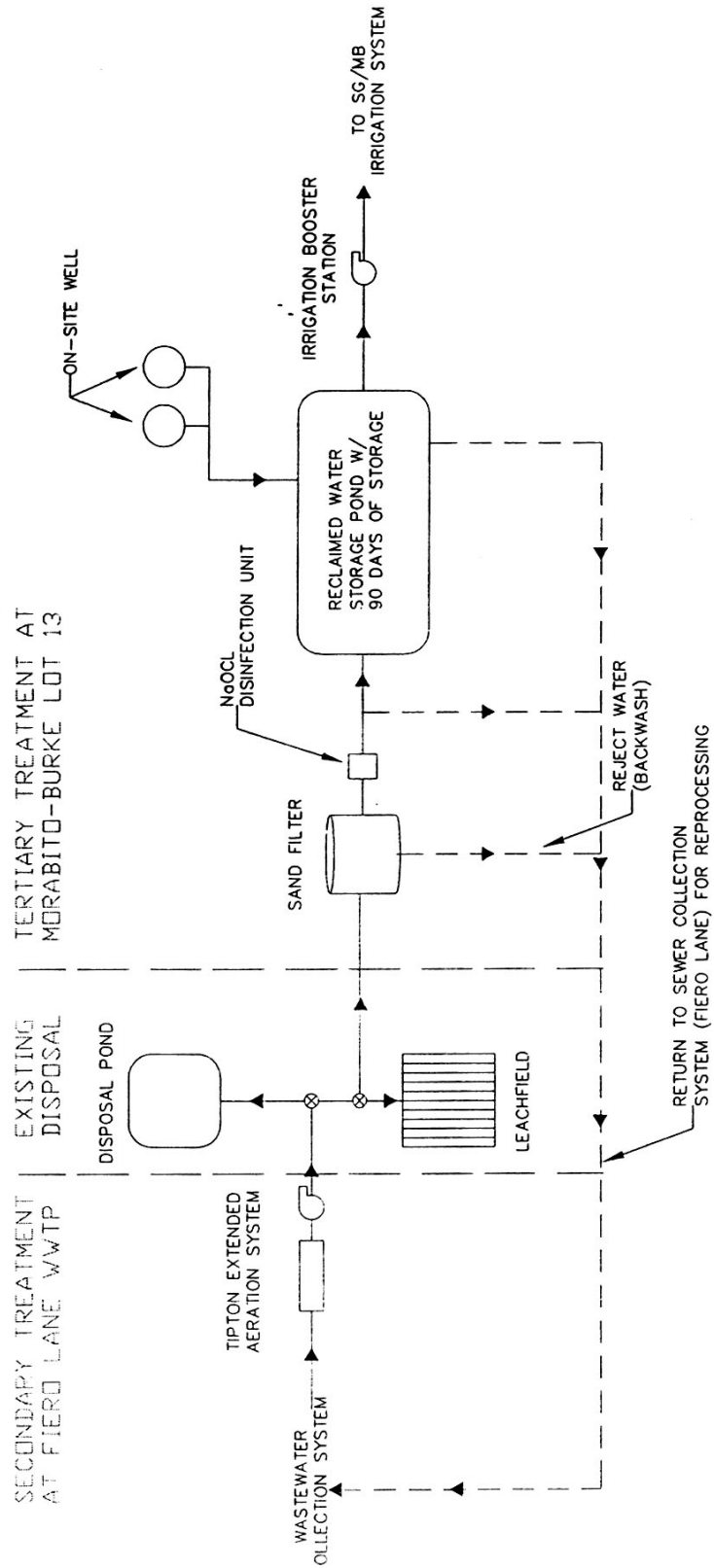


Attachment A
Facility Location
Fiero Lane Water Company, San Luis Obispo County



Attachment B
 Disposal and Recycled Water Use Areas
 Fiero Lane Water Company, San Luis Obispo County

SENN-GLICK/MORABITO BURKE
RECYCLED WATER PROCESS SCHEMATIC



Attachment C
Treatment Process Flow Diagram
Fiero Lane Water Company, San Luis Obispo County