

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. 88-172

WASTEWATER RECLAMATION REQUIREMENTS  
FOR  
TENNECO WEST, INC.  
LAND APPLICATION SITE  
KERN COUNTY

*update change  
name and/or ownership  
of facilities  
#5-01-011  
1/26/01*

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

1. Tenneco West, Inc., (hereafter User) filed a Report of Wastewater Reclamation with the Board on 2 November 1987 pursuant to Section 13522.5 of the California Water Code for a proposed reclamation project that will utilize treated effluent from the City of Bakersfield Wastewater Treatment Plant No. 3.
2. The reclamation site is adjacent to and west of Interstate 5 and about 7 miles west of Plant No. 3. The site includes Sections 1 and 12 of T31S, R25E, and all or part of Sections 5, 6, 7, 8, 9, 16, 17, and 18 of T31S, R26E, MDB&M (see attached map).
3. The reclamation site totals about 4,700 acres and is owned by the User. The environmental impact report completed by the City of Bakersfield for the Plant No. 3 expansion project states that the 4,700-acre site has a total disposal capacity of 20.0 mgd.
4. The User will manage the reclamation site and utilize a 30-day average of 14.0 mgd of treated effluent on a year-round basis to irrigate orchards, vineyards, and fodder, fiber, and seed crops using surface irrigation methods. Treated effluent will be stored on site in a 60-acre irrigation regulating reservoir. The User may change to a spray irrigation system sometime in the future.
5. The City of Bakersfield (hereafter Reclaimer) will supply a 30-day average of 14.0 mgd and peaks of 20.0 mgd of reclaimed water to the User from its Wastewater Treatment Plant No. 3. Plant No. 3 currently produces undisinfected, secondary-treated effluent and is regulated by separate waste discharge requirements. According to terms of a lease agreement executed 16 July 1986, the Reclaimer will perform water quality sampling.
6. The California Department of Health Services has established state-wide reclamation criteria (Title 22, Division 4, Chapter 3, California Code of Regulations) for the use of reclaimed water.
7. In accordance with Kern County Health Department recommendations, the User has posted signs in English and Spanish around the perimeter of the site as a means to preclude public contact with reclaimed water.

8. The Board consulted with the Department of Health Services, Kern County Health Department, and Kern Mosquito Abatement District and considered their recommendations regarding public health aspects for use of reclaimed water.
9. The User has agreed to provide setback distances/buffer zones for irrigation regulating reservoirs in accordance with recommendations received from the Kern County Health Department.
10. The City of Bakersfield has certified a final environmental impact report in accordance with the California Environmental Quality Act (Public Resources Code Sections 21000, et. seq.), and the State Guidelines. The project, as approved by the City, will not have a significant effect on water quality.
11. The Board has notified the User and interested agencies and persons of its intent to prescribe wastewater reclamation requirements for the proposed use.
12. The Board, in a public meeting, heard and considered all comments pertaining to this use of reclaimed water.

IT IS HEREBY ORDERED that the User shall comply with the following:

**A. Prohibitions:**

1. The discharge of reclaimed water to surface waters or surface water drainage courses, either by direct discharge or runoff from the reclamation area, is prohibited.
2. Spray irrigation of orchards and vineyards with undisinfected reclaimed water is prohibited.

**B. Specifications:**

1. Use of reclaimed water shall not cause a nuisance or pollution as defined by the California Water Code, Section 13050.
2. Use of reclaimed water shall be limited to irrigation of orchards, vineyards, and fodder, fiber, and seed crops.
3. The quantity of reclaimed water discharged to the site shall not exceed a 30-day average of 14.0 mgd and a peak flow of 20.0 mgd.
4. If spray irrigation of orchards and vineyards is initiated, reclaimed water shall be adequately disinfected, oxidized, coagulated, clarified, and filtered. For adequate disinfection, the 7-day median number of

coliform organisms shall not exceed 2.2 per 100 milliliters and the maximum number of coliform organisms shall not exceed 23 per 100 milliliters.

5. The following setback distances/buffer zones shall be provided at the reclamation site:

a. Irrigation Regulating Reservoir

<u>Setback Distance</u>	<u>To</u>
500' <sup>1/</sup>	Interstate 5

b. Surface Irrigated Areas

<u>Setback Distance</u>	<u>To</u>
25'	Property line
100'	On-site irrigation wells
500'	Domestic wells
100'	On-site and off-site food crop fields

c. Spray Irrigated Areas

<u>Setback Distance</u>	<u>To</u>
50'	Public roads and property lines
100'	On-site irrigation wells
500'	Domestic wells
500' <sup>2/</sup>	On-site and off-site food crop fields

---

<sup>1/</sup> Measured from the edge of water surface of the reservoir to the nearest travel lane on Interstate 5.

<sup>2/</sup> For undisinfected effluent.

6. The dissolved oxygen in the "regulating reservoir" shall not be less than 1.0 mg/l for 16 hours in any 24-hour period.
7. Reclaimed water shall remain within the designated application area, as defined in Finding No. 2, at all times.

WASTEWATER RECLAMATION REQUIREMENTS  
TENNECO WEST, INC., LAND APPLICATION SITE  
KERN COUNTY

-4-

8. Public contact with reclaimed water shall be precluded through such means as fences, signs and irrigation management practices.
9. Areas irrigated with reclaimed water shall not be utilized for the grazing of milking animals.
10. Areas irrigated with reclaimed water shall be managed so as to prevent the breeding of mosquitos.

C. Provisions:

1. The User shall submit technical reports as directed by the Executive Officer.
2. The User shall comply with Monitoring and Reporting Program No. 88-172 which is attached hereto and by reference made part of this Order.
3. Use of reclaimed water must comply with the provisions of Articles 2, 3, 4, 5, and 7, Chapter 3, Division 4, Title 22 of the California Code of Regulations. Further, the User must obtain written approval from the Regional Board Executive Officer prior to use of reclaimed water for uses other than those listed in Specification No. 2.
4. At least 180 days prior to initiating spray irrigation of orchards and vineyards, the User shall submit or shall assure the Reclaimer submits a written report to the Board describing how compliance with Specification No. 4 will be achieved. Use of this method of irrigation shall be conditional upon the Executive Officer's written acceptance of the report as adequate.
5. For the purposes of this Order, "spray irrigation" means application of reclaimed water to crops by sprinklers and "surface irrigation" means application by flood or furrow irrigation.
6. In the event of any change in control or ownership of land presently owned or controlled by the User, the User shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
7. The Board will review this Order periodically and will revise the requirements when necessary.
8. A copy of this Order shall be available at the reclamation site and the User shall ensure that key operating personnel are familiar with its contents.

WASTEWATER RECLAMATION REQUIREMENTS  
TENNECO WEST, INC., LAND APPLICATION SITE  
KERN COUNTY

-5-

9. Paragraphs of this Order are severable. If any paragraph is found invalid, the remaining paragraphs shall not be affected.
10. The User shall take all reasonable steps to minimize or prevent any discharge in violation of this Order which has a reasonable likelihood of adversely affecting human health. In such an event, the User shall orally report the circumstances to the Executive Officer within 24 hours from the time of discovery.
11. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the User from liability under Federal, State or local laws, and do not create a vested right to continue reclamation.
12. The User shall allow an authorized representative of the Regional Board upon presentation of credentials and other documents as may be required by law, to:
  - a. Enter the premises where reclamation is conducted.
  - b. Have access to and copy, at reasonable times, any records kept under the conditions of this Order;
  - c. Inspect at reasonable times practices and operations regulated or required under this Order; and
  - d. Sample, photograph, and monitor, at reasonable times, for the purposes of assuring compliance with this Order.
13. The User shall comply with all conditions of these wastewater reclamation requirements. Violations may result in enforcement actions, including Regional Board orders or court orders requiring corrective action or imposing civil monetary liability, or in modification or rescission of these wastewater reclamation requirements by the Regional Board.

I, WILLIAM H. CROOKS, 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 Valley Region, on 23 September 1988.

  
WILLIAM H. CROOKS, Executive Officer

LSO:bro:9/23/88 AMENDED  
Attachments

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 88-172

FOR  
TENNECO WEST, INC.  
LAND APPLICATION SITE  
KERN COUNTY

IRRIGATION REGULATING RESERVOIR MONITORING

The following shall constitute the irrigation regulating reservoir monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Dissolved Oxygen <sup>1/</sup>	mg/l	Grab	Weekly

<sup>1/</sup> Dissolved oxygen measurement are to be taken at one foot below the surface near the outfall of the irrigation regulating reservoir between the hours of 0800 and 0900.

MONITORING OF RECLAIMED WATER FOR DIRECT USE ON IRRIGATED CROPS

For Orchards, Vineyards, and Fodder, Fiber, and Seed Type Crops

The User shall monitor and record monthly the quantity of wastewater received, as well as the acreage and types of crops irrigated.

MONITORING TO ASSURE COMPLIANCE WITH PROHIBITIONS, SPECIFICATIONS AND PROVISIONS PRESCRIBED IN THIS ORDER

The User shall monitor the reclamation operation on a continuous basis to assure compliance with this Order.

A brief report shall be prepared by the User each month, describing compliance or noncompliance with Prohibition A.1 (discharge to drainage courses), and Specification B.5 (set-back distances), B.7 (designated area), and B.10 (breeding of mosquitos). In addition, all instances of noncompliance shall be reported.

If noncompliance is reported, the reasons for noncompliance shall be explained and the actions taken to resume compliance shall be described along with any physical or procedural change to assure that noncompliance does not recur. Dates of noncompliance and dates that compliance resumed shall be included as part of the report.

### GROUND WATER MONITORING

The wells that have been selected by the City for the ground water monitoring program around the Tenneco West, Inc., reclamation site shall be sampled annually.

As a minimum, the wells shall be sampled for nitrate, chloride, pH, and specific electrical conductance, and measured for water elevation. The purpose of the program is to provide early warning of potential impacts associated with the disposal operations.

The monitoring wells for the Tenneco West, Inc., reclamation site are described in a report entitled "Groundwater Conditions in the Vicinity of Bakersfield Wastewater Treatment Plant No. 3 - Tenneco Extension", October 1986.

### REPORTING

Monitoring reports shall be submitted monthly by the 15th day of the month following sampling/monitoring for the following:


1. Monitoring of Irrigation Regulating Reservoir.
2. Monitoring of Reclaimed Water for Direct Use on Irrigated Crops.
3. Monitoring to Assure Compliance with Prohibitions, Specifications, and Provisions prescribed in this Order.

The Ground Water Monitoring Reports shall be submitted annually by 15 January of each year.

In reporting the monitoring data, the User shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in a manner that clearly illustrates whether the operation is complying with wastewater reclamation requirements.

For each item of monitoring data where the requirements are not met, the User shall submit a statement of the actions undertaken or proposed which will bring the operation into full compliance with requirements at the earliest time, and shall submit a time table for such corrective actions.

Ordered by

  
WILLIAM H. CROOKS, Executive Officer

23 September 1988  
\_\_\_\_\_  
(Date)

TENNECO WEST, INC.  
LAND APPLICATION SITE  
KERN COUNTY

Bakersfield - USGS 7.5'  
Stevens and Millux Quads

Scale: 1" = 2000'

REGULATING RESERVOIR

INTERSTATE 5

RECLAMATION SITE

Section 1 and 12 of T31S, R25E, and  
Sections 5, 6, 7, 8, 9, 16, 17, & 18 of  
T31S, R26E, MDB&M

