

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
1102-A Laurel Lane  
San Luis Obispo, California 93401

ORDER NO. 89-27

WASTE DISCHARGE REQUIREMENTS  
FOR  
WESTERN FOREST POWER CORPORATION  
FOREST AND AGRICULTURAL WASTE FUELED POWER PLANT  
SOLEDAD, MONTEREY COUNTY

Agency: Soledad  
Energy LLC

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

1. Mr. John Knapp, President, Western Forest Power Corporation, filed a Report of Waste Discharge on August 22, 1986, in accordance with Section 13260 of the California Water Code. The Report was completed on October 15, 1988. The report was for authorization to discharge neutralized boiler water concentrate (blowdown) and cooling water wastewater within the Salinas River sub-basin.
2. Western Forest Power Corporation (hereafter Discharger), intends to operate a forest product waste and agricultural waste field power plant located one mile southeast of Soledad on the north bank of the Salinas River 0.5 mile upstream of the U.S. 101 bridge. The facilities are as shown on Attachment "A" of this order.
3. Up to 120,000 gallons-per-day (455 m<sup>3</sup>/day) of blowdown and cooling waste water are to be discharged at this facility. The treatment facilities consists of a neutralization tank. Wastewater is discharged to a land disposal site. Wastewater is expected to have a projected total dissolved solids concentration of less than 1,500 mg/l, and a sulfate concentration of less than 500 mg/l. Well water will be blended with the discharge as necessary to assure compliance with the TDS limit. Chemical additives used for corrosion control in the boilers include Triazole (2 mg/l in waste stream), Hydroxylated Copolymer (40 mg/l in waste), Phosphonate (10 mg/l) and Ortho Phosphate (15 mg/l).
4. The disposal site is located in the Salinas River flood plain with sandy loam soils to a depth of at least 11 feet. Depth to ground water on July 19, 1986, was 7.5 ft. to 9 ft. Ground water quality at three separate locations within the disposal site averaged as follows:\*

Total Dissolved Solids	1245
Sodium	158
Chloride	134
Sulfate	417

\*Samples collected 7-29-86.

5. An emergency retention pond at a site to be approved by the Executive Officer will provide fifteen days of storage during wet weather or flooding conditions.
6. The Salinas River is located adjacent to and south of the discharge area and flows in a northwesterly direction to the Pacific Ocean.
7. Sewage wastes are discharged into the City of Soledad wastewater system.
8. The Water Quality Control Plan, Central Coastal Basin, (Basin Plan) was adopted by the Board on March 14, 1975, and approved by the State Water Resources Control Board on March 20, 1975. 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. Agricultural Water Supply; and,
  - c. Industrial Water Supply.
10. Present and anticipated beneficial uses of the Salinas River that could be affected by the discharge include:
  - a. Municipal and Domestic supply;
  - b. Agricultural supply;
  - c. Industrial service supply;
  - d. Ground water recharge;
  - e. Water contact recreation;
  - f. Non-contact water recreation;
  - g. Cold freshwater habitat; and,
  - h. Fish migration.
11. On March 8, 1988, the City of Soledad certified a final Environmental Impact Report for the discharger's project in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the California Code of Regulations.

12. 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.
13. On October 8, 1986, the Board notified the Discharger and interested agencies and persons of its intent to adopt 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.
14. After considering all comments pertaining to this discharge during a public hearing on January 13, 1989, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water Code, Western Forest Power Corporation, its agents, successors, and assigns, may discharge waste at its Soledad Power Plant providing compliance is maintained with the following:

(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. Applicable paragraphs are referenced in paragraph D.2. of this Order.)

**A. Prohibitions**

1. Discharge to areas other than the disposal site shown in Attachment "A," is prohibited.
2. Discharge of wastes other than blowdown and cooling wastewater described in Finding No. 3 of this order is prohibited.

**B. Discharge Specifications**

1. Daily flow averaged over each month shall not exceed 120,000 gallons (455 m<sup>3</sup>).
2. Effluent discharged to the disposal site shall not exceed the following limitations:

<u>Parameter</u>	<u>Units</u>	<u>Daily Maximum</u>
Total Dissolved Solids	mg/l	1,500
Sodium	mg/l	250
Chloride	mg/l	250
Sulfate	mg/l	500

3. Effluent discharged to the disposal site shall not have a pH less than 6.5 or greater than 8.4.
4. Surface drainage shall be excluded from the disposal site.
5. Freeboard shall exceed 20 in. (0.5m) in the emergency wastewater retention pond and a 20 in. (0.5m) berm shall be constructed downgradient of the disposal site.
6. Disposal site areas shall be operated in a regular rotating sequence to optimize pollutant removal in surface soils.
7. Disposal site areas shall be dried to approximate field moisture content between wastewater applications.
8. Discharge shall be at least one-hundred feet from water wells.
9. There shall be no discharge when there is a threat of flooding.
10. At least fifteen days wastewater storage shall be provided to assure there is no discharge when the disposal site is flooded.
11. The wastewater storage area shall be protected from the 100-year frequency flood, or discharge shall cease when the disposal site is flooded.

#### C. Ground Water Limitations

1. The discharge shall not cause total dissolved solids concentrations in the groundwater downgradient of the disposal area to exceed 1500 mg/l.
2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying groundwaters, as determined by comparison of samples collected from wells located upgradient and downgradient of the disposal area.

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.

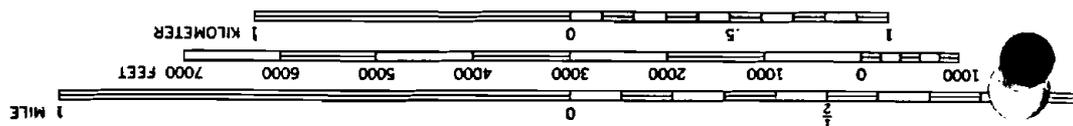
D. Provisions

1. Discharger shall comply with "Monitoring and Reporting Program No. 89-27," as specified by the Executive Officer.
2. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984; except items A.5, A.11, A.13 and A.15-A.17.
3. 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 July 1, 1993, 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, WILLIAM R. LEONARD, 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 January 13, 1989.

  
Executive Officer

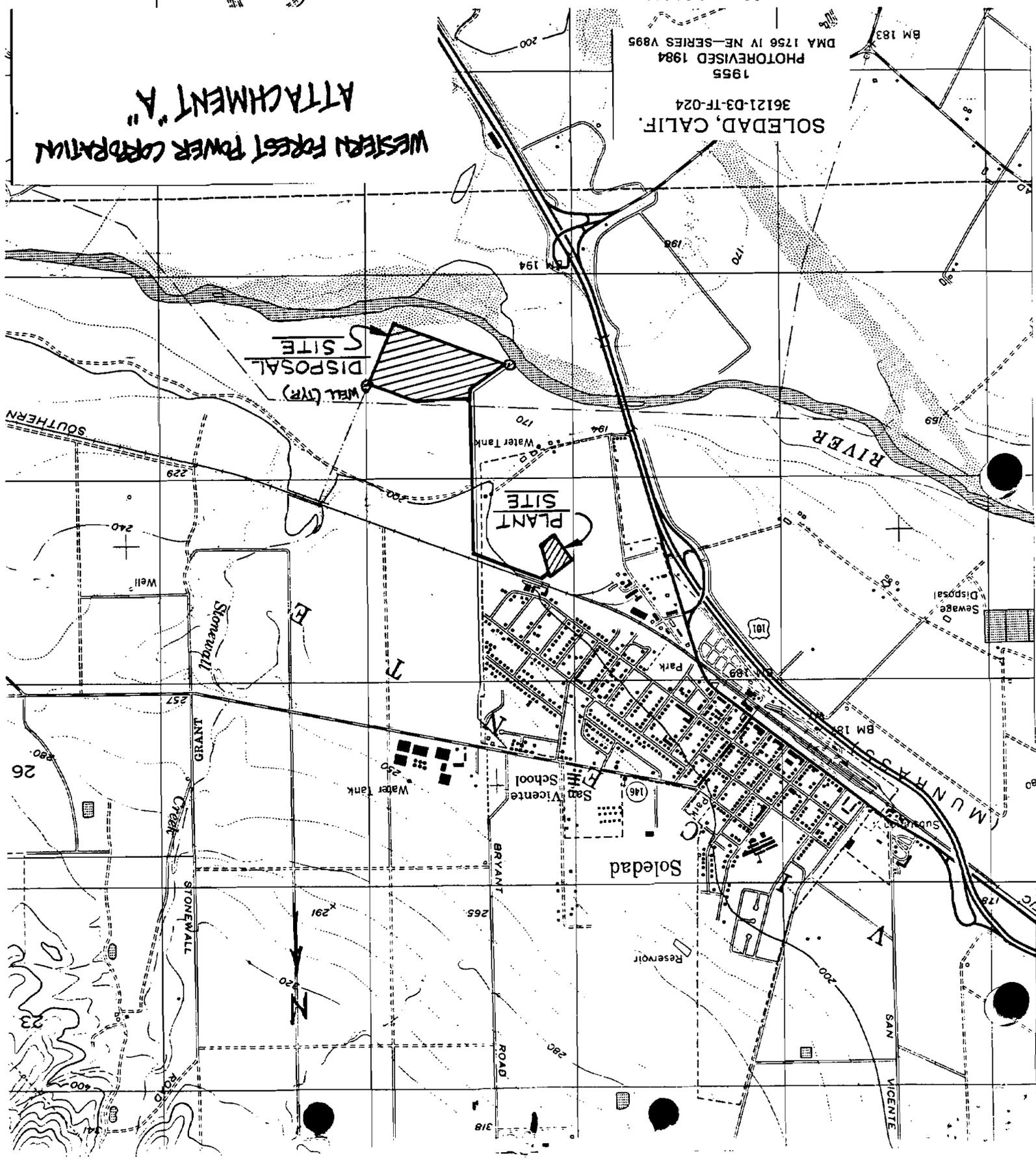
CONTOUR INTERVAL 40 FEET  
DOTTED LINES REPRESENT 10-FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



SCALE 1:24 000

SOLEIDAD, CALIF.  
36121-D3-TF-024  
1955  
PHOTOREVISED 1984  
DMA 1756 IV NE-SERIES V895

WESTERN FOREST POWER CORPORATION  
ATTACHMENT "A"



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. 89-27  
FOR  
WESTERN FOREST POWER CORPORATION  
FOREST AND AGRICULTURAL WASTE FUELED POWER PLANT  
SOLEDAD, MONTEREY COUNTY

INDUSTRIAL WATER SUPPLY MONITORING

Representative samples of the industrial water supply shall be collected and analyzed as follows:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Sampling Frequency</u>
Total Dissolved Solids	mg/l	Grab	Annually-July
Sodium	mg/l	Grab	" "
Chloride	mg/l	Grab	" "
Sulfate	mg/l	Grab	" "
Boron	mg/l	Grab	" "

Effluent Monitoring

Representative samples of effluent discharged to the disposal site shall be collected and analyzed, during the operating season, as follows:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Sampling and Analyzing Frequency</u>
Flow Volume	mgd	Metered	Daily
Mean Daily Flow	mgd	Calculated	Monthly
pH	units	Grab	"
"Total" Nitrogen (as N) (Total Kjeldahl + Nitrate + Nitrite)	mg/l	Grab	July and October
Total Dissolved Solids	mg/l	Grab	" "
Sodium	mg/l	Grab	" "
Chloride	mg/l	Grab	" "
Sulfate			
Boron	mg/l	Grab	" "
Settleable Solids	ml/l	Grab	" "

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Sampling and Analyzing Frequency</u>
All boiler corrosion inhibitors and biocides in use.	ml/l	Grab	July & October, once after start up and once whenever there is a change in use or concentration increase of boiler corrosion inhibitors or biocides.

#### Receiving Water Monitoring

Samples of groundwater shall be collected from shallow wells located upgradient and downgradient of the disposal area as shown on Attachment "A." Discharger shall construct new wells; proposed location and construction details shall be submitted to and approved by the Executive Officer prior to construction. After construction, reference point elevations and well logs of each well will be submitted to this office. After depth to groundwater has been measured, the wells shall be purged and samples shall be collected and analyzed as follows:

<u>Parameter</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Sampling and Analyzing Frequency</u>
Depth to Groundwater	feet	Measured	Semi-Annually (Jan. & July)
Nitrate Nitrogen (as N)	mg/l	Grab	" "
pH	mg/l	Grab	" "
Total Dissolved Solids	mg/l	Grab	" "
Sodium	mg/l	Grab	" "
Chloride	mg/l	Grab	" "
Sulfate	mg/l	Grab	" "
Boron	mg/l	Grab	" "

As an alternative to installing monitoring wells, the discharger may conditionally install a suction lysimeter approximately 2 meters beneath the disposal site area subject to the most use. If samples collected from the lysimeter show compliance with this Order as specified by the receiving water monitoring frequency above, no further testing of ground water is required. Non-compliance with the Order, or inability to obtain a representative sample, will necessitate use of monitoring wells as directed by the Executive Officer.

#### Disposal Area Inspection

The discharger shall make at least weekly inspections of the treatment system and disposal site systems. In making the inspection, the discharger shall note compliance status with this Order, particularly Discharge Prohibitions and Discharge Specifications B.5. through B.10. A log of these inspections shall be maintained. A summary of observations made during the inspections shall be submitted with each monitoring report.

#### REPORTING

Semi-annual monitoring reports and laboratory analysis sheets shall be submitted by the 20th day of February and August.

ORDERED BY

William P. Leonard  
Executive Officer

January 13, 1989

Date