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

ORDER NO. 89-117

WASTE DISCHARGE REQUIREMENTS FOR

JOHNN P. KNAPP

dba SOLEDAD ENERGY PARTNERSHIP

FOREST AND AGRICULTURAL WASTE FUELED POWER PLANT

SOLEDAD, MONTEREY COUNTY

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

- 1. Mr. Johnn 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. By letter dated March 10, 1989, Mr. Johnn Knapp advised that Soledad Energy Partnership, A California General Partnership of Western Forest Power Corporation and Onsite Soledad, Inc., had assumed responsibility for the operation.
- 3. Soledad Energy Partnership (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.
- 4. Up to 120,000 gallons-per-day (455 m³/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), Hydroxolated Copolymer (40 mg/l in waste), Phosphonate (10 mg/l) and Ortho Phosphate (15 mg/l).

5. 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.

- 6. 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.
- 7. The Salinas River is located adjacent to and south of the discharge area and flows in a northwesterly direction to the Pacific Ocean.
- 8. Sewage wastes are discharged into the City of Soledad wastewater system.
- 9. The <u>Water Quality Control Plan, Central Coastal Basin</u>, (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.
- 10. 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.
- 11. 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.

- 12. 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.
- 13. 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.
- 14. 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.
- 15. After considering all comments pertaining to this discharge during a public hearing on July 7, 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, Soledad Energy Partnership, 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

- 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 m³).

2n MEffluent discharged to the disposal site shall not exceed

| <u>Parameter</u> | <u>Units</u> | Daily <u>Maximum</u> |
|-------------------------------|--------------|-------------------------|
| Total Dissolved Solids Sodium | mg/l | 1,500 |
| Chloride | mg/l mg/l | 250 250 |
| Sulfate | mg/l | 500 |
| Dullace | mg/ I | 200 |

- 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 the disposal site is flooded.
- 10. Discharge shall be confined to the designated disposal site without runoff to adjacent properties or drainageways.

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 ground-Dischwaters, 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.

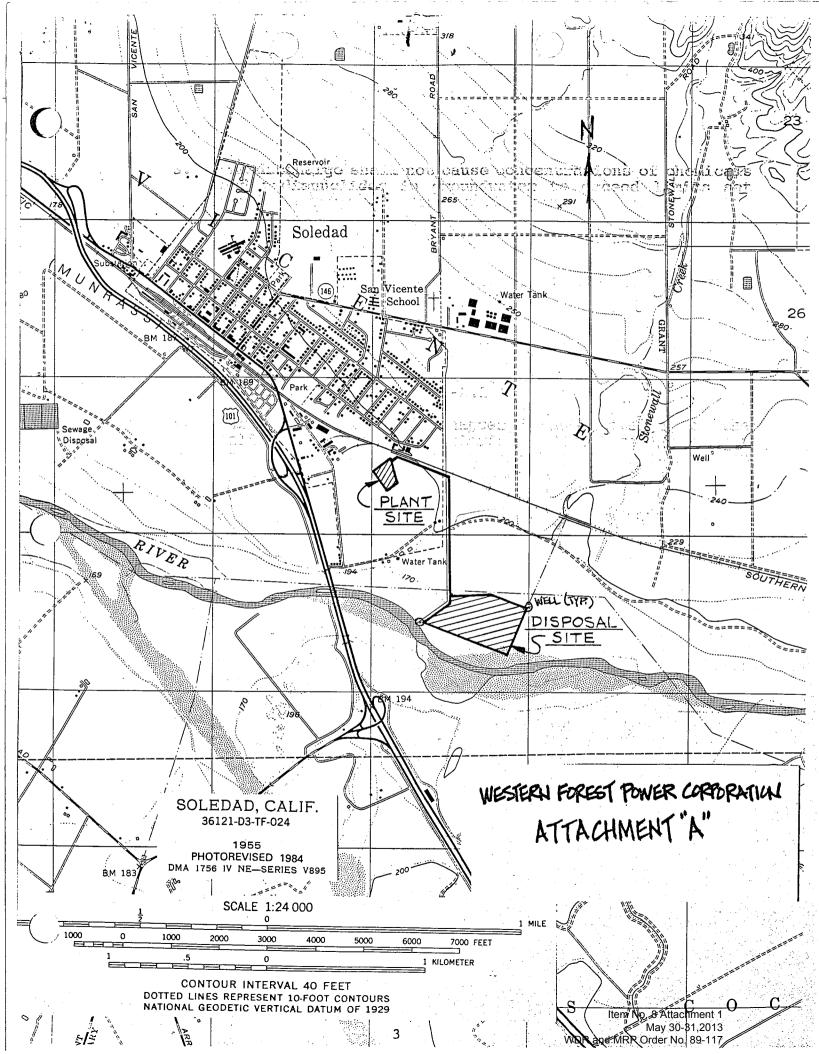
D. Provisions

- 1. Discharger shall comply with "Monitoring and Reporting Program No. 89-117," 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 July 7, 1989.

Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

MONITORING AND REPORTING PROGRAM NO. 89-117 FOR

JOHNN P. KNAPP

dba SOLEDAD ENERGY PARTNERSHIP 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:

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

| | FOR | Type of | Minimum Sampling and Analyzing |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|-----------------------------------------------------------------------------|
| Constituent | <u>Units</u> | <u>Sample</u> | Frequency |
| All boiler corrosion inhibitors and bioc in use. | | Grab | July & October, once after start up and once whenever there |
| | | | is a change in use or concentration increase of boiler corrosion inhibitors |
| A Company of the Comp | | | 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> | Type of <u>Sample</u> | Minimum Sampling and Analyzing Frequency |
|---------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------|---------------------------------------------------|
| Depth to Groundwater | feet | Measured | Semi-Annually (Jan. & July) |
| Nitrate Nitrogen (as N) pH Total Dissolved Solids Sodium Chloride Sulfate Boron | mg/l mg/l mg/l mg/l mg/l mg/l | Grab Grab Grab Grab Grab 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 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 Specifica-tions 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

Executive Officer

July 7, 1989

Date

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