

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION  
81 Higuera Street, Suite 200  
San Luis Obispo, California 93401-5427

WASTE DISCHARGE REQUIREMENTS ORDER NO. 01-035

WDID No. 3 440-107001  
1002001

FOR

BROOKDALE LODGE,  
BROOKDALE LODGE WASTEWATER TREATMENT FACILITY,  
SANTA CRUZ COUNTY

The California Regional Water Quality Control Board, Central Coast Region (hereinafter called the Regional Board) finds that:

**SITE OWNER AND LOCATION**

1. On July 21, 2000, William Gilbert, owner of Brookdale Lodge, filed a Report of Waste Discharge. The report was filed on behalf of Brookdale Lodge Wastewater Treatment Facility for authorization to continue discharging treated domestic wastewater within the San Lorenzo River sub-basin.
2. Brookdale Lodge (hereafter Discharger), 11570 Highway 9, Brookdale, owns and operates a wastewater treatment facility. The facility includes collection lines and a septic-tank/leachfield system. It is located in Santa Cruz County at 11570 Highway 9, Brookdale, approximately 10 miles northwest of the City of Santa Cruz as shown on Attachment "A" of this Order.

**PURPOSE OF ORDER**

3. The primary objectives of this order are to regulate the discharge of treated domestic wastewater described in the Discharger's Report of Waste Discharge and uphold State water quality standards.

**SITE/FACILITY DESCRIPTION**

**Discharge Type**

4. The facility is designed to treat and dispose domestic wastewater from the Brookdale Lodge.
5. The lodge includes a 114-unit motel, cafe, a restaurant and lounge, and a mini mart, as shown on Attachment "A" of this order.

**Design and Current Capacity**

6. Wastewater treatment is a septic system with total tank capacity of 38,500 gallons.
7. Wastewater is discharged to a 5,648 square-foot leachfield.
8. The facility is designed to treat and dispose of an average dry weather flow of 12,060 gallons per day (gpd).
9. The system treats and disposes up to an estimated 6,500 gallons-per-day (gpd) of domestic wastewater.

**Geology**

10. The leachfield disposal area is located on fairly level (2-5% slope) topography consisting of sandy soils to a depth of about

sixteen feet.

May, August, and November.

**Surface and Groundwater**

**BASIN PLAN**

- 11. Clear Creek is located about 200 feet west of the disposal area and flows in a northerly direction. From the vicinity of the disposal site, it flows for about 600 feet before entering San Lorenzo River. The disposal area is located outside the projected 100-year flood plain.
- 12. There are no records of any water supply wells within one-half mile of the discharge. The water supply is provided by the San Lorenzo Valley Water District.
- 13. Depth to ground water was measured at a depth of 15 feet and generally migrates in a southeast direction. Ground water in the vicinity of the discharge has the following concentrations based on results of a ground water sample collected on July 6, 2000:

[Note: Throughout the Order superscripts (BP) are provided to indicate requirements taken from the Basin Plan. Requirements not referenced are based on staff's best professional judgment.]

Constituent	Concentration
Total dissolved solids	140 mg/l
Sodium	15 mg/l
Chloride	8.1 mg/l
Total nitrogen	3.6 mg/l
Nitrate as N	0.6 mg/l

17. The Water Quality Control Plan, Central Coastal Basin (Basin Plan), was adopted by the Regional Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Regional Board approved amendments of the 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. BP

14. Storm water flows from the vicinity of the leachfield area and into the San Lorenzo River. Because the flow is less than one million gpd, the facility is not required to have a storm water pollution prevention plan (see storm water control requirements in Specification No. 11 of this Order).

18. Present and anticipated beneficial uses of Clear Creek that could be affected by the discharge include: BP

- a. Domestic and municipal supply;
- b. Ground water recharge;
- c. Water contact recreation;
- d. Non-contact water recreation;
- e. Wildlife habitat;
- f. Cold fresh-water habitat;
- g. Fish migration;
- h. Fish spawning; and
- i. Commercial and Sport Fishing.

**MONITORING AND REPORTING PROGRAM (MRP)**

19. Present and anticipated uses of groundwater in the vicinity of the discharge include: BP

- a. Domestic supply;
- b. Agricultural supply;
- c. Industrial process supply; and
- d. Industrial service supply.

15. The MRP requires influent monitoring, effluent monitoring, septic tank monitoring, ground water monitoring, system performance monitoring, and disposal field inspection. No surface water monitoring is proposed at this time.

20. The San Lorenzo Wastewater Management Plan (WWMP), adopted by Santa Cruz County Board of Supervisors, was approved by the Regional Board on April 5, 1995 as Resolution No. 95-04. The WWMP includes findings and recommendations resulting from investigation of elevated nitrate levels in

16. Sampling and inspection results shall be reported quarterly by the 1st day of February,

surface water and groundwater in the San Lorenzo River watershed. The WWMP recommends the Regional Board require nitrogen control measures in the issuance of new or revised waste discharge requirements. The WWMP's goal is for at least 50 % reduction in nitrogen from onsite disposal systems. BP

21. This order requires 50 % reduction of nitrogen in effluent, consistent with Resolution No. 95-04. BP
22. The surface water quality objectives specified in the Basin Plan for the San Lorenzo River are: BP

Analyte	Value	Units
Total Dissolved Solids	250	mg/l
Chloride	30	mg/l
Sulfate	60	mg/l
Boron	0.2	mg/l
Sodium	25	mg/l

23. The range of median ground water quality objectives in the San Lorenzo Sub-Basin, as specified in the Basin Plan, are reported as follows: BP

Analyte	Range	Units
Total Dissolved Solids	100-250	mg/l
Sodium	10-20	mg/l
Chloride	20-30	mg/l
Nitrate (as N)	1-5	mg/l
Sulfate	10-50	mg/l

#### CEQA

24. These waste discharge requirements are for an existing facility and are exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) in accordance with Section 15301, Chapter 3, Title 14, of the California Code of Regulations.

#### EXISTING ORDERS AND GENERAL FINDINGS

25. The discharge has been regulated by Waste Discharge Requirements Order No. 95-11, adopted by the Regional Board on March 10, 1995. The Regional Board has regulated the discharge from Brookdale Lodge since July 11, 1975.
26. 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.
27. On **January 28, 2001**, the Regional 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.
28. In a public hearing on May 18, 2001, the Regional Board heard and considered all comments pertaining to the discharge and found this Order consistent with the above findings.

**IT IS HEREBY ORDERED**, pursuant to authority in Section 13263 of the California Water Code, that Brookdale Lodge, its agents, successors, and assigns, may discharge wastewater at Brookdale Lodge Wastewater Treatment Facility 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 this Order.]

**PROHIBITIONS**

- 1. Discharge of wastewater to the treatment system from other than Brookdale Lodge is prohibited.
- 2. Discharge of wastewater is prohibited outside of the leachfield disposal area shown on Attachment "A".
- 3. Wastewater on the soil surface of the leachfield disposal area is prohibited.
- 4. Bypass of the collection and treatment systems and discharge of untreated or partially treated wastes directly to the leachfield disposal area is prohibited.
- 5. Discharge of water softener regenerant wastes to the treatment system is prohibited.

**SPECIFICATIONS**

**Effluent Limitations**

- 1. Daily flow averaged over each month shall not exceed 12,060 gallons.
- 2. Effluent discharged to the leachfield shall not have a pH less than 6.5 or greater than 8.3. BP
- 3. Total Nitrogen in wastewater shall be reduced by at least 50 percent prior to subsurface disposal. BP Compliance will be determined from samples taken at points before and after extended treatment.

**Ground Water Limitations**

- 4. The discharge shall not cause concentrations of radionuclides in ground water to exceed limits specified in Title 22, Chapter 15, Article 5, Section 64443 of the California Code of Regulations. BP
- 5. The discharge shall not cause concentrations of organic chemicals in ground water to exceed limits specified in Title 22, Chapter

15, Articles 5.5, Section 64444.5 of the California Code of Regulations. BP

- 6. The discharge shall not cause ground water to exceed concentrations of chemical constituents limits specified in Title 22, Chapter 15, Article 4, Section 64435, of the California Code of Regulations as listed below BP.

Constituents	Maximum Contaminant Level (mg/l)
Nitrate (as N)	10

- 7. The discharge shall not cause a statistically significant increase of mineral constituent (total dissolved solids, sodium, chloride, and nitrate) concentrations in the ground water.

**System Operation Specifications**

- 8. High water alarms, readily audible or visible to maintenance personnel, shall be installed at the facility.
- 9. Standby power or portable pumps shall be available for use when wastewater-pumping facilities fail.
- 10. The Discharger currently has an onsite septic system. To comply with the San Lorenzo Wastewater Management Plan, this system shall be modified to reduce nitrogen levels by a minimum of 50%. The Discharger will comply with the timeline listed below for system construction:

Task	Completion Date
Completion of extended treatment system design	1/1/2002
Installation of extended treatment system	7/1/2003
Submit a technical report detailing optimal system performance	1/1/2004

**Solids/Solid Waste Control**

11. Solids accumulation in the septic tank shall be measured semi-annually and the appropriate tank cleaned when it appears (a) the bottom of the scum layer will be within 4" of the bottom of the outlet device before the next scheduled inspection or (b) the sludge level will be within 10" of the outlet device before the next scheduled inspection.
12. Solids cleaned from tanks shall be disposed of at a septage receiving facility approved by the Regional Board Executive Officer.

**Stormwater Control**

13. Extraneous surface drainage shall be diverted away from the treatment system and leachfield disposal area.

**PROVISIONS**

1. Order No. 95-11, "Waste Discharge Requirements for Brookdale Lodge, Brookdale Lodge, Santa Cruz County" adopted by the Regional Board on February 10, 1995, is hereby rescinded.
2. Discharger shall comply with "Monitoring and Reporting Program No. 01-035" and any amendments thereto, as specified by the Regional Board Executive Officer.
3. The Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January 1984; except Item Nos. A.8, A.11, A.17, and C.16.
4. Pursuant to Title 23, Division 3, Chapter 9 of the California Code of Regulations, the Discharger must submit a written report to the Regional Board Executive Officer not later than January 1, 2010, 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.

**ATTACHMENTS**

1. Attachment A, Site and Vicinity Map
2. Monitoring and Reporting Program Order No. 01-035.
3. Standard Provisions and Reporting Requirements for Waste Discharge Requirements, January 1984.

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 May 18, 2001.



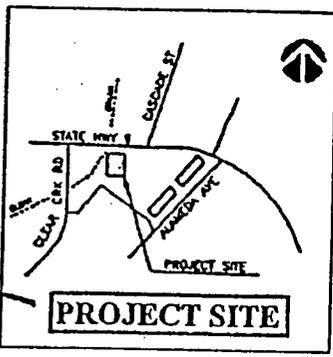
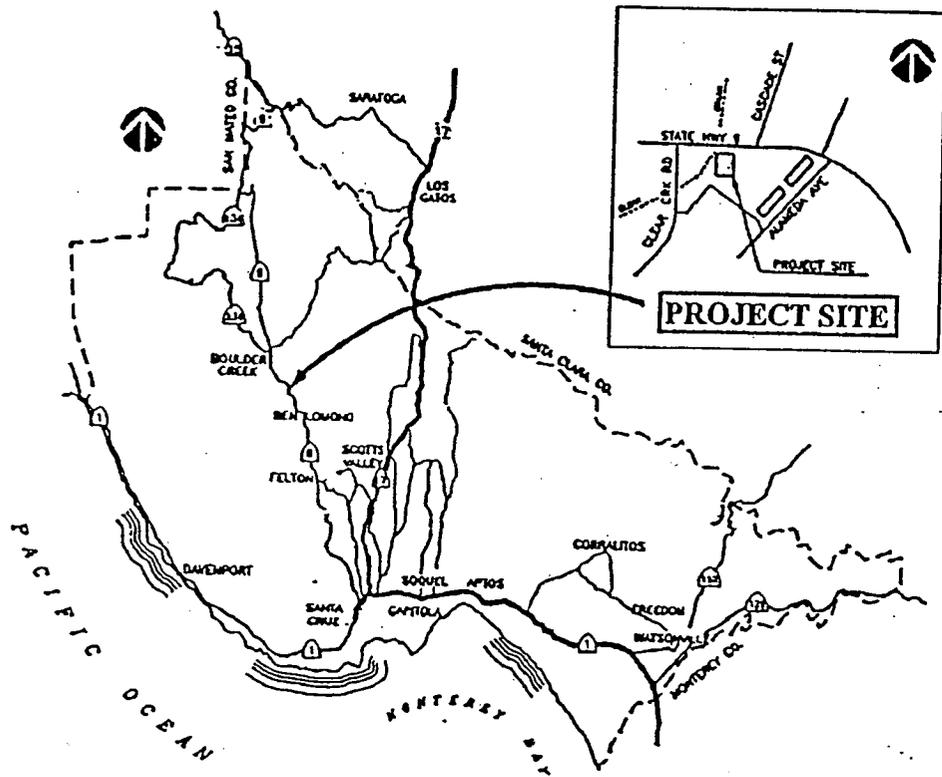
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Executive Officer

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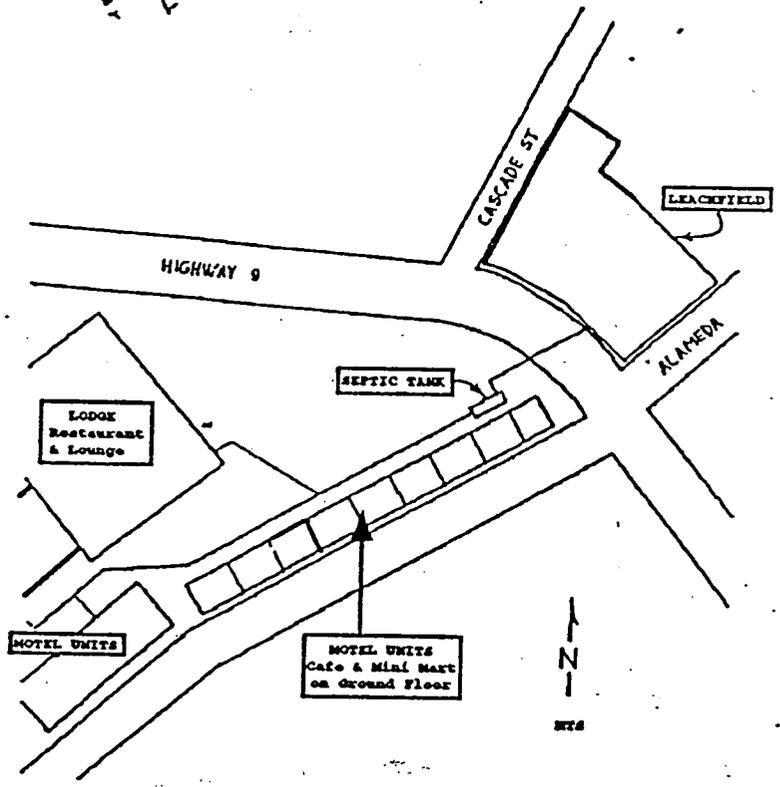
Task: 121-01

File: Discharger file; Brookdale Lodge, Brookdale Lodge



**VICINITY MAP**

**SITE DIAGRAM**



**ATTACHMENT "A"**  
**Brookdale Lodge**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM NO. 01-035  
FOR  
BROOKDALE LODGE  
BROOKDALE LODGE WASTEWATER TREATMENT FACILITY  
SANTA CRUZ COUNTY**

**INFLUENT MONITORING<sup>1</sup>**

Representative influent samples shall be collected before treatment and analyzed for the following:

Parameter	Units	Type of Sample	Minimum Measuring Frequency
BOD, 5-day	mg/l	Grab	Monthly
pH	pH units	"	"
Organic Nitrogen (N)	mg/l	"	* Twice per month
Nitrate (N)	"	"	"
Nitrite (N)	"	"	"
Ammonia (N)	"	"	"
Total dissolved solids	"	"	Quarterly
Total suspended solids	"	"	"

(N) – All nitrogen data shall be reported as nitrogen.

\*Staff requires monitoring twice per month for the Nitrogen series (Organic Nitrogen, Nitrate, Nitrite, and Ammonia) for a minimum of 15 months. The samples shall be collected at least 10 days apart. After 15 months, Discharger shall submit a report analyzing the nitrogen removal efficiency of the wastewater treatment plant. Regional Board staff will evaluate the report to determine the need and frequency for continued nitrogen monitoring.

<sup>1</sup> Influent monitoring shall begin after installation of enhanced wastewater treatment system. The enhanced wastewater treatment system shall be installed by July 1, 2003.

**EFFLUENT MONITORING**

Representative effluent samples shall be collected prior to leachfield disposal and analyzed for the following:

Parameter	Units	Type of Sample	Minimum Measuring Frequency
Flow to Leachfield	Gallons per day	Metered	Monthly
BOD, 5-day	mg/l	Grab	"
pH	pH units	"	"
Organic Nitrogen (N)	mg/l	"	* Twice per month <sup>2</sup>
Nitrate (N)	"	"	"
Nitrite (N)	"	"	"
Ammonia (N)	"	"	"
Total suspended solids	"	"	Quarterly
Total dissolved solids	"	"	"
Sodium	"	"	"
Chloride	"	"	"

(N) – All nitrogen data shall be reported as nitrogen.

\*Staff requires monitoring twice per month for the Nitrogen series (Organic Nitrogen, Nitrate, Nitrite, and Ammonia) for a minimum of 15 months. The samples shall be collected at least 10 days apart. After 15 months, Discharger shall submit a report analyzing the nitrogen removal efficiency of the wastewater treatment plant. Regional Board staff will evaluate the report to determine the need and frequency for continued nitrogen monitoring.

<sup>2</sup> Effluent nitrogen monitoring shall be conducted quarterly until the installation of enhanced wastewater treatment system. The additional effluent nitrogen monitoring shall commence once the enhanced wastewater treatment system is installed or July 1, 2003, whichever comes first.

**SEPTIC TANK MONITORING**

Each septic tank shall be opened and measured for the following items:

Measurement	Units	Type of Measurement	Minimum Measuring Frequency
Distance of scum layer from bottom of outlet device	Inches	Staff gauge	Semi-Annually (June & Dec.)
Distance of sludge layer from bottom of outlet device	Inches	Staff gauge	Semi-Annually (June & Dec.)

Septic tanks shall be pumped as necessary to ensure proper performance and protection of the leachfield. In the event of a leachfield failure or impending failure, the Regional Board Executive Officer and the County Environmental Health Department shall be notified immediately. In the event of failure, the area shall be posted to prevent public contact with domestic wastewater.

**GROUND WATER MONITORING**

The Discharger shall sample monitoring wells in accordance with the following schedule:

Constituent	Units	Type of Sample	Minimum Sampling and Analyzing Frequency
Total Dissolved Solids	mg/l	Grab	Semi-annually (June & Dec)
Sodium	"	"	"
Chloride	"	"	"
Organic Nitrogen (N)	"	"	"
Nitrate (N)	"	"	"
Nitrite (N)	"	"	"
Ammonia (N)	"	"	"
pH	pH units	"	"

**BIOSOLIDS DISPOSAL**

The biosolids portion of the wastewater is disposed of at the City of Santa Cruz Wastewater Treatment Facility or the City of Watsonville Wastewater Treatment Facility. Biosolids at these facilities are regulated under Order Nos. 00-044 and 98-019, respectively.

**DISPOSAL AREA INSPECTION**

Monthly inspections shall be made of the leachfield disposal area for evidence of surfacing effluent. During the inspection, the level of effluent in each leachfield trench shall be recorded. Notes shall be kept of observations and shall be summarized in the Quarterly Monitoring Reports. In the event of a leachfield failure or impending failure, the Regional Board Executive Officer and the County Environmental Health Department shall be notified immediately. In the event of failure, the area shall be posted to prevent public contact with domestic wastewater. Repairs shall be made as quickly as possible.

**REPORTING**

Sampling and inspection results shall be reported quarterly by the **1<sup>st</sup> day of February, May, August, and November**. Semi-annual sampling results shall be submitted with the ~~January and July~~ quarterly reports.

*Feb. Aug.*

The quarterly reports shall also include a summary of sewage collection or treatment or disposal systems spill(s) during the reporting quarter. At a minimum, the following information shall be reported:

1. Location, volume, date, and time of sewage spill, and the number of times spill has occurred at this location within the last five years.
2. Corrective action(s) taken to stop and mitigate spill and prevent future spills.
3. A progress report on the installation of the new treatment system required in Order No. 01-035, Specifications, Item No. 9.

If there is no spill during the reporting quarter, a "no sewage spill" statement shall be included in the quarterly report.

All data shall be submitted to the Board in both hard copy and electronic format. The electronic data submission shall conform to criteria approved by the Central Coast Regional Water Quality Control Board Executive Officer.

ORDERED BY: \_\_\_\_\_

*[Signature]*  
Executive Officer

May 18, 2001

Date