

**STATE OF CALIFORNIA  
CALIFORNIA WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR REGULAR MEETING OF MAY 12-13, 2005**

Prepared on April, 2005

**ITEM: 13**

**SUBJECT: LOW THREAT AND GENERAL DISCHARGE CASES**

**DISCUSSION**

**Low Threat and General Discharge Cases**

**General Waste Discharge Requirements for Wineries:**

**Domaine Alfred Winery, San Luis Obispo County, [Matt Thompson 805/549-3159]**

Regional Board staff enrolled Domaine Alfred Winery under the General Waste Discharge Requirements for Discharges of Winery Waste (General WDRs) on March 7, 2005. Domaine Alfred Winery was previously unregulated by the Regional Board.

Domaine Alfred Winery's waste discharge is described as follows:

- The winery is located at 7677 Orcutt Road, San Luis Obispo County.
- Wine production will be expanded to 26,000 cases annually. Peak process wastewater flow will be 2,250 gallons per day during the crush season. Waste discharge will be minimized by water conservation (e.g. pressure washers for cleaning), use of ozone in lieu of some cleaning compounds, and reverse osmosis instead of water softeners.
- Process wastewater will be screened by floor drain screens, clarified in a 7,000-gallon septic tank(s), and treated in a subsurface treatment constructed wetland. The treatment constructed wetland will be 2,800 ft<sup>2</sup> by 3 feet deep, lined with plastic, filled with pea gravel, and planted with hydrophytic plants. Treatment will occur subsurface in the plant root zone. The treatment constructed wetland is expected to remove 98% of biochemical oxygen demand, and 99% of suspended solids

from process wastewater. Treated wastewater will be disposed via evaporation and percolation in an approximately 10,000 ft<sup>2</sup> by 6 ft deep evaporative constructed wetland. The evaporative constructed wetland will be located at least 100 feet from any watercourse.

- Pomace and screenings will be composted at a dedicated composting area for at least six months and then incorporated into surrounding soils.

Enrollment under the General WDRs requires Domaine Alfred Winery to comply with Monitoring and Reporting Program (MRP) No. R3-2003-0084. Water supply quality, wine production, chemical usage, effluent flow and quality, and disposal area monitoring are required. Groundwater and disposal area soils monitoring are not required as the treatment and disposal method presents little or no threat to underlying groundwater quality. Regional Board staff will begin regular inspections of Domaine Alfred Winery this fall to ensure continued compliance with the General WDRs.

**Waivers of Waste Discharge Requirements:**

**Honea Vineyards, Solvang, Santa Barbara County [Matt Thompson 805/549-3159]**

Staff tentatively enrolled Honea Vineyards, 2201 Alamo Pintado Road, Solvang, Santa Barbara County, under General Waiver Resolution No. 2002-0115 on March 23, 2005. Honea Vineyards will produce up to 8,000 cases of wine annually, and generate 480 gallons per day of process wastewater (average) during the harvest season. Process wastewater will be settled in a 1,500-gallon septic tank equipped with an effluent filter,

and disposed in two 350 lineal foot leachfields located south of the proposed new winery building. The property is supplied with water from a local water district. The nearest water supply well is several hundred feet from the proposed leachfields. Pomace will be composted and spread in surrounding vineyards.

Honea Vineyard's waiver is contingent on satisfaction of the following conditions:

- Compliance with the Prohibitions, Recommendations, and Specifications of the General Waste Discharge Requirements for Wineries;
- Pomace, lees, bentonite, and diatomaceous earth shall be excluded from the septic system to the extent practicable.
- Any incidence of overflow from the wastewater system shall be reported to the Executive Officer within 24 hours.
- Staff shall be allowed to visit the facility in the future to ensure continued compliance with these conditions.

Staff recommends the Regional Board concur with waiving Waste Discharge Requirements for Honea Vineyards under these conditions. This conditional waiver will expire May 12, 2010.

#### **Statewide General Waste Discharge Requirements Order No. 97-10-DWQ:**

##### **Celite Lompoc Plant [Todd Stanley 805/542-4769]**

**Summary.** Celite Corporation (Celite) owns and operates a diatomaceous earth mining facility three miles south of Lompoc. Celite treats and disposes domestic wastewater in compliance with existing Order No. 88-111. Celite's waste discharge also complies with the provisions of State Water Resources Control Board Water Quality Order No. 97-10-DWQ, *General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (General Order).

Staff proposes the rescission of Order No. 88-111 (please see the "Waste Discharge Requirements" Section of this Agenda), and the enrollment of Celite under the General Order No. 97-10-DWQ.

**Discussion.** On July 8, 1988, the Regional Board adopted Order No. 88-111, which contains discharge specifications for domestic wastewater. Monitoring and Reporting Program (MRP) No. 88-111 (revised June 26, 1990) includes monitoring requirements for Celite's Research and Development Laboratory (R&D Lab), which at the time was a new component of Celite's waste discharge.

The R&D Lab discharges only non-hazardous rinsewater to the treatment and disposal system. Monitoring data indicate R&D Lab discharges have an insignificant impact on Celite's total waste discharge (i.e., concentrations, relative flow, and the nature of the waste stream). Please see the Celite Item in the "Waste Discharge Requirements" Section of this Agenda for detailed discussion of R&D Lab monitoring. Staff is recommending the elimination of R&D Lab monitoring.

On November 18, 1997, the State Board adopted the General Order. Domestic wastewater treatment and disposal systems with a maximum average daily flow of 20,000 gallons or less that discharge to land are eligible for coverage under the General Order.

The General Order prohibits the discharge from polluting groundwater or surface waters, and requires the following for all small domestic systems: 1) The systems shall be essentially odor-free and sited, designed, constructed, operated, maintained, and monitored in accordance with the Basin Plan; 2) The Discharger shall not exceed the plant's design flow; and, 3) The discharge shall comply with the Basin Plan.

Celite discharges an average daily flow of approximately 4,000 gallons of primary treated domestic wastewater to conventional leachfields, and is therefore eligible for coverage under the General Order.

Celite's onsite treatment system consists of a 25,000-gallon Imhoff tank and leachfields. An Imhoff tank functions similarly to a septic tank, providing removal of settleable and floatable wastes, and anaerobic digestion of solids. Its two compartments are vertically configured (one over the other), in comparison with the side-by-side configuration of conventional septic tanks.

Monitoring data demonstrate that Celite’s waste discharge complies with all WDR Order No. 88-111 effluent limitations (as well as those of the General Order).

Staff’s recommendation to regulate Celite with the General Order rather than an individual WDR Order should not impair Celite’s treatment plant performance or the Board’s oversight of their compliance. The General Order clearly assigns responsibility to enrolled Dischargers for compliance with requirements in the General Order, the Basin Plan, and state and federal law. Regional Board staff will maintain its routine compliance inspections.

Staff intends to revise the General Order’s Monitoring and Reporting Program No. 97-10-DWQ as listed below:

Monitoring Requirement	Existing MRP 88-111	Revised MRP 97-10-DWQ
Influent pH	Quarterly	None
Influent COD <sup>1</sup>	Quarterly	Quarterly, changed to effluent
Effluent metals	Annually	None
R&D Lab pH, TOC <sup>2</sup> , and organics	Monthly (pH and TOC) Annually (organics)	None

<sup>1</sup> Chemical Oxygen Demand

<sup>2</sup> Total Organic Carbon

Please see the Celite Item in the “Waste Discharge Requirements” Section of this Agenda for analysis and support for the changes noted above. Other than staff’s change from monthly to quarterly effluent monitoring for Total Suspended Solids, revised MRP No. 97-10-DWQ will maintain all other MRP No. 88-111 monitoring requirements.

The Regional Board’s rescission of Order No. 88-111 will activate Celite’s enrollment under the General Order.

**Conclusions and Recommendations:** Regulation of Celite’s waste discharge by means of Waste Discharge Requirements Order No. 97-

10-DWQ should continue to adequately protect groundwater beneficial uses.

Staff proposes that the Board rescind WDR Order No. 88-111 via the Celite Item in the “Waste Discharge Requirements” Section of this Agenda, thereby enrolling Celite under the Statewide General Order.

**Statewide General NPDES Permit for Discharges from Utility Vaults Order No. 01-11 DWQ:**

**Sprint Communications Company [Sandy Cheek 805/542-4633]**

Regional Board staff enrolled Sprint Communications Company (Sprint) in the Statewide General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Surface Waters CAG990002 on March 17, 2005. The Regional Board has not previously regulated Sprint. Sprint’s regionwide, periodic, unscheduled discharges will be from utility vaults resulting from storm water inflow and subterranean seepage. Enrollment requires Sprint to comply with Monitoring and Reporting Program No. 01-11 DWQ.

**General Low Threat Permit Order No. 01-119**

**Well Pict Berries, Watsonville, Santa Cruz County [Michael Higgins 805/542-4649]**

On March 2, 2005, Well-Pict Berries Inc (Discharger) submitted a Notice of Intent and fee for enrollment under the Low-threat General Permit, WDR Order No. 01-119. The Discharger proposes to discharge evaporative condensate to a stormdrain tributary to the Pajaro River in Watsonville, Santa Cruz County. Order 01-119 permits discharge of up to 0.1 million gallons per day of evaporative condensate; the discharge’s estimated flowrate will peak at 6,000 gallons per day, well within compliance. The Discharger employs a Dolphin water treatment system to reduce scaling in process piping. The Dolphin system increases the water supply’s salinity about two-and-one-half times in the discharge, resulting in about 900 mg/L Total Dissolved Solids (TDS) in the discharge. The Basin Plan’s surface water quality objective for Chittenden, five miles away, is 1,000 mg/L TDS. This corresponds to the Title

22 Secondary Maximum Contaminant Level (MCL) for drinking water of 1,000 mg/L. Therefore, the discharge complies with the Basin Plan's water quality objectives and the MCL, and thereby protects the Pajaro River's surface and groundwater MUN beneficial use (drinking water).

**California Water Service Company, Salinas District, Station 13-01, Velocity Flow Test [Martin Fletcher, 805/549-3694]**

Regional Board staff received an application from the California Water Services regarding a drinking water supply well in Salinas (Cal Water Well Station 13-01) that currently requires a velocity flow test to pinpoint the depth of contamination.

Recent zone specific sampling and analysis has shown that methyl tertiary-butyl ether (MTBE), trichloroethylene (TCE), and perchloroethylene (PCE) are entering the well bore at Station 13-01 at various depths. t-butyl alcohol (TBA), a byproduct of MTBE, has not been detected in the well. The zone-specific sampling will be analyzed in conjunction with the resulting flow velocity profile to determine at which depths casing perforations can be sealed off to prevent the entry of the contaminants while maintaining the overall output capacity of the well.

A discharge flow rate of approximately 800 gallons per minute (GPM) is expected during the velocity profile test. The test is expected to occur 8 hours a day for 3 days with a total discharge volume of approximately 1.15 million gallons. Best management practices for erosion control, including energy dissipaters, such as geotextile barriers, gravel bags or plastic tarps, will be used as necessary at the site and the location where the discharge enters the Reclamation Ditch. Monterey County Water Resources Agency, owner of the Reclamation Ditch, has approved the discharge and use of the temporary erosion controls in the Ditch.

The flow velocity test will involve the use of a tracer dye, Bright Dyes FWT Red 50 Liquid. The Bright Dyes FWT Red 50 Liquid is certified by the National Sanitation Foundation for use in potable water at recommended levels (50-100 milliliters per 5 gallons of water). Chlorine will not be present in the discharge as the potable water

chlorination system will be disconnected from the discharge piping during the course of the test. Based on a working knowledge of the well's characteristics, sediment is not expected to be discharged during the test.

All organic contaminants (e.g., MTBE, TCE, and PCE) will be removed with two Calgon granulated activated carbon (GAC) vessels. The vessels are each loaded with 22,000 pounds of carbon and will be piped together in series. Of the three contaminants, MTBE at 30 ppb and 800 GPM has the fastest breakthrough time of approximately 20 days at for one GAC vessel. The two GAC vessels have 50 hours of current usage, resulting in an estimated 18 day MTBE breakthrough for the first GAC vessel.

Regional Board staff has modified Monitoring and Reporting Program (MRP) No. 01-119 to be more applicable to the expected discharge. The modified MRP includes daily monitoring for MTBE, TCE, and PCE between the GAC vessels.

The Discharger has agreed to comply with the General Permit, and will implement mitigation measures to avoid or mitigate significant impacts. The Discharger was notified of its enrollment in the General Low Threat Permit on March 1, 2005.

**Duke Energy Morro Bay Power Plant Offsite Tank Farm Decommissioning Dewatering Project, 3 Miles East of Morro Bay on Highway 41 [Peter von Langen, 805/549-3688]**

On April 12, 2005, staff enrolled the Duke Energy Morro Bay Power Plant offsite Tank Farm decommissioning dewatering discharge under the General NPDES Permit for Discharges with Low Threat to Water Quality (Low Threat General Permit). Approximately 750,000 gallons of rain water has accumulated in the former oil storage tanks that are being decommissioned three miles east of Morro Bay off Highway 41. Although initial sampling results indicate non-detect levels for many parameters, the rainwater that has accumulated in these tanks has low (~9 mg/L) Total Petroleum Hydrocarbon (TPH) levels from contacting residual oil from tanks that were emptied in the mid-1990's. This water will be pumped out at approximately 100 gallons per minute first through a coalescing inclined plate oil water separator followed by a sufficient treatment

method (such as Granular Activated Carbon) that results in a discharge effluent with TPH levels less than 1 mg/L. The cleaned rainwater will not enter surface waters, but instead will be discharged and percolate into a vegetated containment basin on the Tank Farm that was designed for catastrophic spills.

Enrollment under the Low Threat General Permit requires the discharger to comply with Monitoring and Reporting Program No. 01-119 (MRP), which has been modified specifically for this discharge. The MRP requires daily monitoring of effluent flow, turbidity, and pH; and one-time monitoring of petroleum compounds and volatile organic compounds. The discharger has agreed to immediately cease the discharge and contact this agency immediately if a visual sheen is observed during the discharge or if TPH levels exceed 1 mg/L. Additionally, the County Qualified Environmental Monitor (CQEM) weekly reports will be expanded to include a summary of water treatment activities and monitoring results and the RWQCB will be added to the distribution list.

## ATTACHMENTS

1. Celite Lompoc Plant, Revised Monitoring and Reporting Program 97-10-DWQ

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