STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF JULY 11, 2008

May 19, 2008

ITEM NUMBER: 10

SUBJECT: **Rescission of Waste Discharge Requirements (Order No. 92-13) for Atascadero Unified School District, San Benito Elementary School**

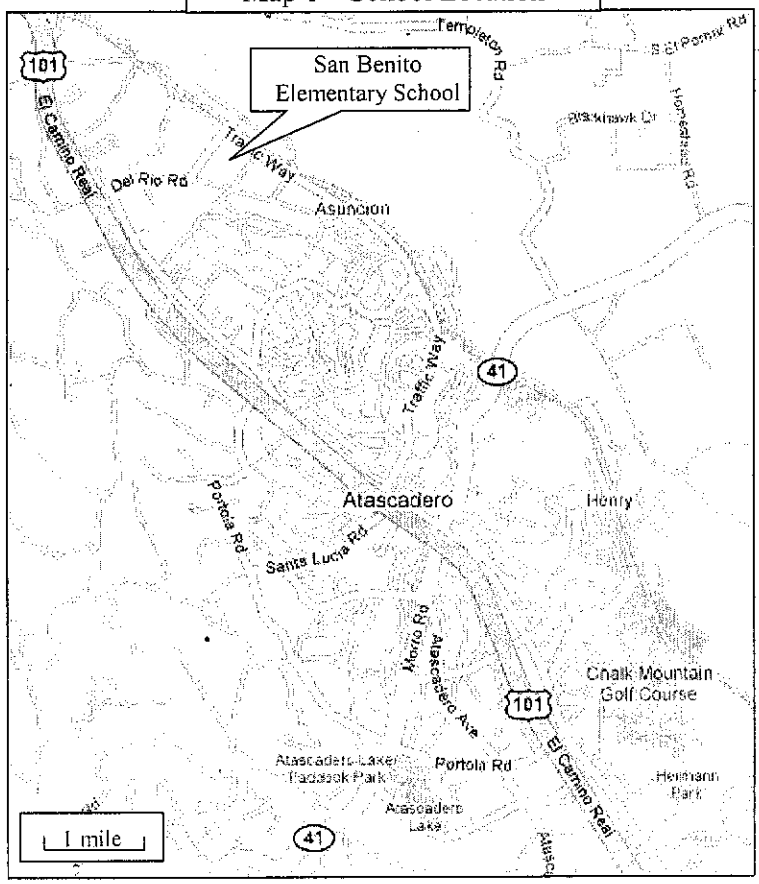
and

Coverage under the *Statewide General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (Order No. 97-10-DWQ), San Luis Obispo County

KEY INFORMATION

Discharger ..... Atascadero Unified School District, San Benito Elementary School
Location ..... City of Atascadero, San Benito Road at Traffic Way
Discharge Type ..... Sanitary Wastewater from school
Treatment/Disposal .. Septic Tank/Leachfield
Design Capacity ..... 10,250 gallons per day (gpd)
Recycling ..... None
Existing Order 92-13

Map 1 – School Location



This Action:

1) **Rescind Waste Discharge Requirements Order No. 92-13 for Atascadero Unified School District, San Benito Elementary School,**

And

2) **Enroll the Atascadero Unified School District, San Benito Elementary School discharge under the Statewide General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems (Order No. 97-10-DWQ).**

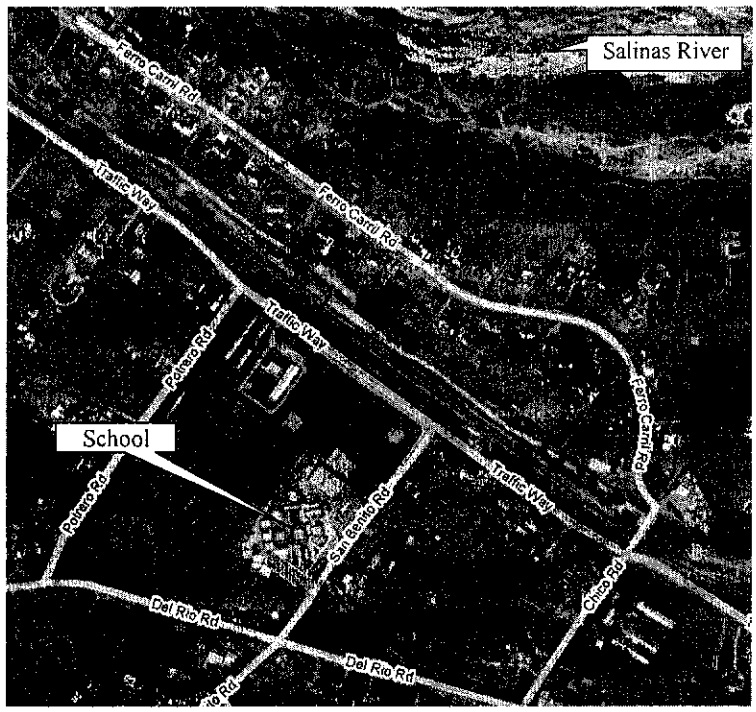
SUMMARY

The Atascadero Unified School District's San Benito Elementary School discharges 10,250 gallons per day of sanitary wastewater thorough a septic tank and leachfields. In 1992, the Water Board adopted Waste Discharge Requirements Order No. 92-13 to regulate that discharge. Because Order No. 92-13 is over 15 years old, it is due for review. Staff reviewed the order and

concluded that regulation under the *Statewide General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems* (Order No. 97-10-DWQ) is appropriate.

DISCUSSION

The Atascadero Unified School District's San Benito Elementary School is located in the City of Atascadero, as shown in Map 1. The 13-acre site includes buildings for 675 students and faculty, who generate up to 10,250 gallons per day of sanitary wastewater. The wastewater flows through a septic tank and leach field system.



In 1992, the Water Board adopted Waste Discharge Requirements Order No. 92-13 to regulate the discharge. Because Order No. 92-13 is over 15 years old, it is due for review. Consequently, staff reviewed materials back to the last review date in the discharger's file.

The file review took into account:

- Compliance with the Water Quality Control Plan, statewide plans and policies, and federal and state laws and regulations
- Correspondence
- Compliance Inspection Reports
- Self Monitoring Reports
- Active enforcement orders
- Significant changes in discharge volume or characteristics or in the beneficial uses of receiving waters.

In addition to the file review, staff inspected the facility. Also, staff considered whether any new programs or policies might be employed to regulate the discharge. The following discussion distills the review's salient considerations.

The Basin Plan promotes wastewater consolidation whenever possible. So, in reviewing the discharge, staff investigated whether connection to an existing Publically Owned Treatment Works (POTW) was feasible. In this case, the nearest POTW belongs to the City of Atascadero. Normally, extending collection lines is feasible when many parties can share the cost. But, rural areas are not conducive to sewering. To connect the school's discharge to the city's collection system would require a lift station and about a mile of force-main pipeline through a rural part of the city. Although staff prepared no detailed cost estimate, experience

suggests that a small school district could not afford such a connection. Consequently, continued use of the onsite system seems appropriate until the area becomes more urbanized.

Clearly, the discharge's impact on receiving water is a paramount consideration. In an onsite system, the amount of pollutants entering the receiving water (the "loading"), coupled with the receiving water's ability to absorb the pollutants, determines the extent of the impact. Properly functioning onsite systems oxidize and reduce organic wastes and pathogens to acceptable levels. The school's system meets our Basin Plan's design criteria for onsite systems and seems to be functioning properly. Therefore, organic wastes and pathogens have not been an issue.

Inorganic loading is another story. When a community uses supply water, it adds pollutants - including salts. The amount of salt added varies from community to community. The following factors influence salt variations:

- service area demographics (some cultures use more salt or eat saltier foods than others),
- type and amount of cleaning and personal care products,
- water conservation and evaporative losses (each concentrates salts),
- hobbyist activities,
- collection system infiltration (of shallow groundwater with high sodium, chloride, and total dissolved solids),
- commercial and industrial loading.

Onsite system technology does not appreciably remove soluble inorganic wastes prior to discharge. Thus, inorganic wastes are carried through the system and delivered to the environment. The amount and timing of that delivery would affect water quality if the wastewater's inorganic concentration exceeds that of the receiving water. Because inorganic treatment technology is economically infeasible for small dischargers, the Water Board set Order No. 92-13's discharge salt limits to allow "normal" salt increases while prohibiting excessive salt increases. Table 1 shows Order No. 92-13's allowable salt increases. For comparison purposes, Table 1 also shows relatively recent literature values for expected salt increases, which are similar to Order No. 92-13's salt limits.

Table 1 - Salt Increases (mg/L)

Constituent	Order No. 92-13	Wastewater Engineering, 3rd edition, Metcalf and Eddy
Total Dissolved Solids	250	150 – 380
Sodium	70	40 – 70
Chloride	65	20 – 50

Recognizing the impracticality of treating to remove salt, source reduction stands out as the most viable way of improving the discharge quality. The school does not employ unusual salt generating practices, such as water softening, and would be hard-pressed to reduce salts. Occasionally, however, the San Benito Elementary School discharge exceeded a salt limit. When the San Benito Elementary School reported an exceedance, it was usually near the limit. Because the excursion was near the limit, and considering that the limits were based on a general survey and not site-specific data, it is reasonable to assume that the San Benito Elementary School discharge is not unusually salt-laden. Staff concludes that the school is not generating excessive salts.

Another reason for the excursions could be related to water conservation. Using less water to carry the same amount of pollutants concentrates the pollutants and makes the discharge seem stronger. Since 1992, the school has implemented water conservation measures. In 1992, flows were near Order No. 92-13's flow limit of 10,250 gallons per day. Recent flows are reported to be around 7,500 gpd. Water conservation contributed to those flow decreases. The school's reported inorganic waste strength increases appear likely due to water conservation measures, not increased pollutant mass loading.

Considering that the school's onsite system is functioning properly, and the discharge has not resulted in greater water quality degradation, it is reasonable to allow continued discharge. Rather than updating the school's individual waste discharge requirements, staff proposes to

1. Rescind Waste Discharge Requirements Order No. 92-13 for Atascadero Unified School District, San Benito Elementary School, and

2. Enroll the Atascadero Unified School District, San Benito Elementary School discharge under the Statewide General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems (Order No. 97-10-DWQ).

Regulating the school's discharge under Order No. 97-10-DWQ will save staff time and improve regulatory consistency.

COMMENTS

The Atascadero Unified School District, the City of Atascadero, and the San Luis Obispo County Environmental Health Department were notified by letter dated January 14, 2008, of staff's recommendation to rescind Waste Discharge Requirements Order No. 92-13 and approve coverage via the General Order. Those parties were invited to submit written comments by March 14, 2008. No formal comments were received.

RECOMMENDATION

Rescind Waste Discharge Requirements Order No. 92-13 and approve coverage of the Discharger under the General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Treatment Systems, Order No. 97-10-DWQ.

ATTACHMENT

Existing Order No. 92-13

TJK
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Atascadero USD San Benito Elementary
Task:126-01