

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

STAFF REPORT FOR ENFORCEMENT PANEL HEARING OF OCTOBER 6, 2005

Prepared on September 13, 2005

SUBJECT: Administrative Civil Liability Order No. R3-2005-0090 for Monarch Grove Homeowners Association, Monarch Grove Wastewater Reclamation Facility, San Luis Obispo County

KEY INFORMATION

Location: 250 Howard Avenue, Los Osos
Type of Waste: Domestic
Design Capacity: 30,000 gallons per day (gpd)
Current Flow: 20,000 gpd
Treatment: Sedimentation, biological treatment using trickling filters, chemical addition, filtration and chlorine disinfection
Recycling: Golf course irrigation
Existing Orders: Water Reclamation Requirements Order No. R3-2002-0061 (producer) and Water Reclamation Requirements Order No. 93-82 (user)

SUMMARY

Monarch Grove Homeowners Association operates wastewater collection, treatment and disposal facilities to provide sewerage service to the Monarch Grove Residential Development and Sea Pines Hotel and Golf Course. The discharge is subject to Water Reclamation Requirements Order No. R3-2002-0061, adopted by the Central Coast Water Board on May 31, 2002. The Discharger has violated requirements specified in Order No. R3-2002-0061 by discharging inadequately treated wastewater and failing to submit monitoring reports.

The Central Coast Water Board Executive Officer issued Cleanup or Abatement Order No. R3-2005-0083 on June 10, 2005, requiring corrective actions and issued Complaint No. R3-2005-0090 on June 29, 2005, in the amount of \$75,000. No discharge violations have occurred since issuance of the Complaint. An Order for civil liability in the amount of \$75,000 is proposed (Attachment 1). The intent of this action is to induce compliance resulting in improved water quality and public health protection.

DISCUSSION

Background and Facility Description: Monarch Grove Homeowners Association (Discharger) owns and operates a wastewater reclamation facility located at Sea Pines Golf Course in the community of Los Osos. The facilities provide collection, treatment and disposal of wastewater generated by the 83-unit Monarch Grove residential development and 48-unit Sea Pines Hotel and Golf Course. The facilities are shown on Attachments "A" and "B" of the Water Reclamation Requirements Order (Attachment 2 to this staff report). Treated wastewater is blended with well water and used to irrigate the adjacent Sea Pines Golf Course.

The treatment facility has a peak design flow capacity of 30,000 gpd. Treatment facilities include flow equalization, primary clarifier, biological treatment using three-stage trickling filters, chemical addition for coagulation, secondary clarifiers, sand filters and chlorine disinfection. The treatment facility is designed to meet California Code of Regulations, Title 22 reclamation requirements for clarified, oxidized, coagulated, filtered and

disinfected wastewater acceptable for unrestricted golf course irrigation.

Discharge from the Monarch Grove wastewater facility was originally authorized in 1993, when the Central Coast Water Board adopted Order No. 93-81, Water Reclamation Requirements for Monarch Grove Associates (the original developer). The wastewater facility was constructed in 1998 and began treating wastewater from the first homes completed within the development in September of that year. In 2002, the Central Coast Water Board updated the Water Reclamation Requirements for the facility, naming the Monarch Grove Homeowners Association as the responsible entity.

Compliance History: During its first year of operation, sporadic instances of noncompliance occurred. For the most part, these violations resulted from the inherent difficulty in treating very low initial flows (when only a few homes were built and discharging to the system) and problems associated with start up of the new facility. Inadequate chlorine residual and pH problems were resolved by minor modifications and fine-tuning process equipment.

The second and third years of operation, however, demonstrated ongoing turbidity and nitrogen effluent violations, as well as occasional other issues. Staff described and listed the violations occurring between 1999 and 2002 in a May 31, 2002 Staff Report. In order to address violations, the plant operator made a variety of process adjustments in the hopes of improving treatment levels and bringing the effluent into compliance. Although improvements normally resulted from such adjustments, lasting compliance was not demonstrated.

During 2001, Anastasi Development Corporation (original WRR assignee) retained the consulting firms of Camp Dresser & McKee Inc. and later Ensitu Engineering Inc. to evaluate treatment deficiencies and recommend corrective actions. Recommendations from these consultants were implemented during the fall of 2001 and effluent quality (and compliance with requirements) improved. Improved compliance was sustained

until 2004, when effluent quality and compliance deteriorated again.

In 2004, Monarch Grove Homeowners Association retained MicroMedia Company for wastewater facility operational services. MicroMedia assumed operational responsibility and installed its experimental treatment unit. In April 2004, Water Board Staff inspected the facility and informed MicroMedia representatives (orally and later by letter) that prior authorization from the Water Board as well as from county and state health agencies is needed for treatment modifications. Modifications to reclamation facilities and other changes to Title 22 Engineering Reports (for the Production, Treatment and Use of Reclaimed Water) are subject to review and approval of the Executive Officer after consultation with state and local health departments (in accordance with California Code of Regulations, Title 22 and the Discharger's Water Reclamation Requirements). During the following months, MicroMedia submitted descriptive information regarding its treatment unit. However, information submitted has not supported MicroMedia's claim that the treatment unit can or will result in effluent compliance.

Current Status: From January 1, 2004, to present the Discharger has reported the following discharge and reporting violations:

- 1/04 Turbidity exceeded mean limit of 2 NTU on 9 days.
- 2/04 Turbidity exceeded mean limit of 2 NTU on 15 days and exceeded limit of 5 NTU more than 5% of the time on 3 days. Chlorine contact time (minimum 90 minutes required) was not met on 2 days.
- 3/04 Turbidity exceeded mean limit of 2 NTU on 8 days. Nitrogen exceeded limit of 22 mg/L (23.2 mg/L reported).
- 4/04 Turbidity exceeded mean limit of 2 NTU on 13 days and exceeded limit of 5 NTU more than 5% of the time on 1 day.
- 5/04 Turbidity exceeded mean limit of 2 NTU

on 5 days. Chlorine contact time (minimum 90 minutes required) was not met on 1 day.

6/04 Turbidity exceeded mean limit of 2 NTU on 10 days.

7/04 Turbidity exceeded mean limit of 2 NTU on 16 days.

8/04 Turbidity exceeded mean limit of 2 NTU on 8 days. Nitrogen exceeded limit of 22 mg/L (24.5 mg/L reported).

9/04 Turbidity exceeded mean limit of 2 NTU on 8 days. Nitrogen exceeded limit of 22 mg/L (25.6 mg/L reported).

10/04 Turbidity exceeded mean limit of 2 NTU on 21 days. Nitrogen exceeded limit of 22 mg/L (28.3 mg/L reported). Monitoring report submitted 98 days late.

11/04 Turbidity exceeded mean limit of 2 NTU on 24 days and exceeded limit of 5 NTU more than 5% of the time on 1 day. Nitrogen exceeded limit of 22 mg/L (24.5 mg/L reported). Monitoring report submitted 68 days late.

12/04 Turbidity exceeded mean limit of 2 NTU on 10 days. Nitrogen exceeded limit of 22 mg/L (23 mg/L reported). Monitoring report submitted 38 days late.

1/05 Turbidity exceeded mean limit of 2 NTU on 5 days. Annual monitoring report submitted 43 days late.

2/05 Turbidity exceeded mean limit of 2 NTU on 5 days.

3/05 No violations reported.

4/05 Turbidity exceeded mean limit of 2 NTU on 3 days. (These violations were not addressed in the Complaint since the information was not available at the time of Complaint issuance.)

5/05 No violations reported.

6/05 No violations reported.

7/05 No violations reported.

During March 2005, the Discharger reported minor changes in operating practices (mixing sludge tank while removing solids resulting in improved solids removal and increased recirculation), and effluent compliance appears improved. Whether or not these minor operational changes will result in lasting improvements to effluent quality is yet to be demonstrated.

Cleanup or Abatement Order: On June 10, 2005, the Central Coast Water Board's Executive Officer issued Cleanup or Abatement Order No. R3-2005-0083 (Attachment 3 to this report). The Cleanup or Abatement Order (CAO) requires that the Discharger:

1. Immediately cease discharging inadequately treated wastewater to the golf course;
2. Submit by June 30, 2005, a summary of economic benefit gained by noncompliance;
3. Submit by July 15, 2005, a corrective actions plan;
4. Complete corrective actions by November 30, 2005; and
5. Submit monthly status reports

To date, the Discharger has not responded adequately to the Cleanup or Abatement Order requirements. However, it should be noted that effluent compliance has significantly improved during the past few months. Water Board staff met with the Discharger on July 21, 2005, to discuss compliance issues and sent a follow-up letter describing the inadequacy of their response to the Cease and Desist Order (Attachment 4 to this report).

MicroMedia sent a second Cleanup or Abatement

Order response letter (on behalf of the Discharger) dated August 10, 2005 (Attachment 5). In its August 10th letter, MicroMedia estimated financial benefit from violations at \$500 per day of violation (total amount of \$85,500 for violations described in the Cleanup or Abatement Order). This amount is based on the cost to haul noncompliant wastewater off-site. MicroMedia also reiterated earlier requests to install its experimental treatment process at Monarch Grove. As described above and in the Worksheet for Assessment of Administrative Civil Liability (included in Attachment 6), MicroMedia's proposed treatment unit is not supported by documentation indicating it will result in effluent compliance.

Civil Liability: On June 29, 2005, the Central Coast Water Board Executive Officer issued Complaint No. R3-2005-0090 for administrative civil liability in the amount of \$75,000 (Attachment 6 to this report). The Complaint (and associated Worksheet for Assessment of Administrative Civil Liability) describes discharge and reporting violations occurring during the period of January 2004 to March 2005.

The proposed Administrative Civil Liability Order (Attachment 1) reflects the same information as contained in the Complaint, with the following corrections and resulting revisions.

1. The summary of violations is revised to reflect that one Total Nitrogen violation did not occur in February 2004, but did occur in March 2004. This information was contained in the Discharger's self-monitoring reports, but incorrectly summarized by staff in both the Cleanup or Abatement Order and the Complaint.
2. The summary of violations is revised to add one chlorine contact time violation occurring in May 2004.
3. The summary of violations is revised to reflect submittal of the October 2004 monitoring report 98 days late, rather than the 158 days incorrectly listed.

4. The corrections described above result in total violations of 171 days of discharge violations (revised from 170), and 247 days late monitoring reports (revised from 307). These changes are also reflected in the potential liability amount of \$32,818,040 (revised from \$32,878,040).

Monarch Grove Homeowners Association submitted an August 12, 2005, letter (Attachment 7) requesting that the Water Board not assess the proposed penalty.

At report preparation time, staff had not yet received a complete summary of economic benefit or compliance plan (CAO requirements 2 and 3). However, staff expects to receive this information prior to the Regional Board hearing on the matter, and plans to address any further submittals in a supplemental staff report.

COMMENTS

Monarch Grove Homeowners Association (HOA) submitted a response letter/report addressing the wastewater facility's compliance history and actions taken to restore and ensure ongoing compliance with effluent limitations. The Discharger's submittal is included as Attachment 8 and key points are summarized below.

1. The Monarch Grove HOA summarized the history of its wastewater facility in a manner consistent with that provided in the Staff Report above.

Staff Response: Staff concurs with the historical information provided. A slight error appears in the HOA's submittal (page 2, paragraph 4), "MicroMedia abandoned operation of the plant from August 31, 2005" (not 2004).

2. The Monarch Grove HOA retained Fluid Resources Management and Ripley Pacific (wastewater consultants) and Allied Engineers (original plant designer) to evaluate facility performance and prepare recommendations for improvements. Based upon these recommendations, the Monarch Grove HOA

concludes that modification to operations and maintenance procedures as well as solids handling facilities (sludge tank improvements) will result in continued compliance with effluent limitations. However, the HOA's submittal does not commit to implementing these recommendations within a specific timeframe.

Staff Response: Recommendations provided in the Monarch Grove HOA's submittal primarily address operations and maintenance activities, which should be implemented immediately. Although specific details and costs associated with sludge tank improvements were not provided, improvements are clearly needed in order to retain solids within the sludge tank for ultimate removal. Accordingly, solids handling improvements should also be implemented as soon as possible.

3. In 2002, Monarch Grove HOA entered into agreement with the Los Osos CSD and has collected \$112,000 from its members to facilitate connection to the Los Osos CSD wastewater project, when it is available (estimated within two years).

Staff Response: Staff believes that connection to the community-wide sewer system will facilitate improved long-term compliance with water quality objectives, and is the most efficient and cost-effective method of waste management for Monarch Grove. Based on these conclusions, staff commends Monarch Grove HOA for these proactive steps aimed at preparing for and financing connection to the sewer system.

4. Monarch Grove HOA requests that no penalty be assessed, or that the proposed \$75,000 penalty be reduced. The request is based in part on the conclusion that no significant threat to water quality or public health resulted from the discharge violations. The HOA also claims it has been "pro-active since day one in trying to find a viable solution for its plant." Also, the HOA claims that the penalty would create an economic hardship for homeowners.

Staff Response: Staff concurs with the conclusion

that significant water quality or public health impacts have not occurred from the discharge violations (as described on page 2, Section II.1 of the Worksheet for Assessment of Administrative Civil Liability). However, staff does not use the term "proactive" when describing the HOA's wastewater compliance activities. Regardless of the HOA's intent, its agents (MicroMedia and the plant operator) have responded to violations in a reactive mode; after several meetings, correspondence, Notices of Violations and other enforcement actions taken by Staff. Identification of treatment deficiencies and effective, long-term compliance assurance measures was not pursued until after the Complaint for ACL was issued.

5. The Monarch Grove HOA requests that if a penalty is assessed, the amount should be applied to either treatment plant improvements or the costs associated with connection to the community-wide sewer.

Staff Response: Based upon the information provided in the HOA's September 9, 2005 submittal, most of the compliance recommendations consist of implementing operations, maintenance and staffing measures described in the Operations & Maintenance Manual. In other words, those actions which should have been implemented all along. Although staff agrees that the measures should be implemented, such measures are not above and beyond what was always required and what may have resulted in improved effluent compliance had the measures been implemented. With this in mind, staff does not support applying any of the penalty amount to implementing recommendations A, B, C, D, F and G (described in Attachment 8).

However, solids handling features of the facility appear to have some originally unforeseen design deficiencies. Also, connection to the Los Osos CSD community sewer represents a long-term water quality improvement/dependability project, which staff whole-heartedly supports. It should also be noted that further investment in treatment facility upgrades at Monarch Grove are likely to have short-term benefit due to connection to the community sewer currently under construction (provided connection is available within the next two years, as

currently estimated). Therefore, applying a portion of the penalty amount to upgrading the sludge holding facilities (costs as yet undetermined) and/or the costs associated with connection to the community sewer could be considered as projects above and beyond that which was originally required. Based upon information available to date, Staff believes that a portion of the penalty may be appropriately applied to costs associated with connection to the Los Osos CSD wastewater system, if such connection is available before December 31, 2007.

RECOMMENDATION

Adopt ACL Order No. R3-2005-0090.

The Los Osos CSD has established a fund to assist low-income residence with the costs associated with connecting to the sewer system. If the Water Board assesses monetary penalty in this matter (beyond any amount allocated to Monarch Grove facility improvements), Staff recommends that funds be directed to the Los Osos CSD low-income assistance fund to facilitate connection to the community sewer in a timely manner.

ATTACHMENTS

1. Proposed ACL Order No. R3-2005-0090
2. WRR Order No. R3-2002-0061
3. CAO No. R3-2005-0083
4. CAO follow-up letter dated July 26, 2005
5. August 10, 2005, letter from MicroMedia
6. Complaint No. R3-2005-0090
7. Monarch Grove HOA's August 12, 2005 letter
8. Monarch Grove HOA's September 9, 2005 letter