STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MAY 8, 2009

Prepared on March 30, 2009

ITEM NUMBER: 21

SUBJECT: Reissuance of Waste Discharge Requirements, National Pollutant

Discharge Elimination System Permit No. CA0049417 for the Ragged

Point Inn, San Luis Obispo County, Order No. R3-2009-0020

KEY INFORMATION

Location: 26900 State Route One, Carmel, Monterey County

Type of Discharge: Ocean discharge and onsite reuse via drip irrigation

Permitted Flow: 0.015 million gallons per day (MGD; dry weather flow design capacity)

Average Flow: 0.0089 MGD (monthly average flows for 2004 - 2006)

Type of Treatment: Secondary via activated sludge with tertiary filtration and ozone disinfection

Disposal: Ocean discharge of disinfected tertiary effluent to Pacific Ocean via cliff

Surface drip irrigation of disinfected tertiary or undisinfected secondary effluent

Solid Wastes: Offsite disposal of biosolids at Cold Canyon Landfill

Existing Orders: NPDES Permit, Waste Discharge Requirements Order No. R3-2003-0051

This Action: Adopt Revised Waste Discharge Requirements (NPDES Permit)

SUMMARY

The proposed Order is presented in the statewide format for National Pollutant Discharge Elimination System (NPDES) permits. This standardized format presents the proposed Order with all supporting information appended as associated attachments. Consequently, the facility information and permit evaluation discussion normally contained within the staff report are presented in the Fact Sheet as Attachment F to the proposed Order. Attachments to the proposed Order consist of the following:

Attachment A - Definitions

Attachment B – Site Location and Vicinity Maps

Attachment C - Process Flow Schematic

Attachment D – Standard Provisions

Attachment E – Monitoring and Reporting Program (MRP) No. R3-2008-0007

Attachment F - Fact Sheet

The following discussion briefly outlines changes to the proposed Order since it was last reissued in October 2003. Comments on, and any additional changes made to, the draft Order based on the comments received during the public comment period are also outlined and discussed in Attachment F. See the Order attachments for additional detail regarding the proposed Order.

DISCUSSION

Significant changes

The proposed Order contains the following three major modifications from the previous permit:

Disinfection, bacterial limits and monitoring

The permit requires disinfection prior to ocean discharges and contains effluent limitations for bacteria to address revised receiving water contact standards for bacteria contained within the 2005 Ocean Plan. Provisions for additional [triggered] effluent monitoring were also added to verify compliance with the bacteria receiving water standards being applied at end-of-pipe. These changes were made in lieu of receiving water monitoring because the collection of representative receiving water samples is not feasible or safe given the location of the discharge point on a high cliff above the ocean (see section VI.E.1 of the Fact Sheet [Attachment F] for more information).

Effluent monitoring for Ocean Plan pollutants

In accordance with Appendix II of the 2005 Ocean Plan, the permit now requires effluent monitoring for all of the Ocean Plan Table B pollutants one time during the term of this Order even if no ocean discharges occur during the permit term. The previous permit only required annual monitoring for a subset of the Table B pollutants (the metals) and exempted the discharger from monitoring for the Table B organic pollutants based on provisions within the 2001 Ocean Plan (Paragraph III.G.2) allowing periodic certification by the Discharger that "such substance(s) is not added to the waste stream, and that no change has occurred in activities that could cause such substance(s) to be present in the waste stream" in lieu of sampling. This exemption was removed from the 2005 version of the Ocean Plan and is no longer applicable. The annual monitoring requirement for the Table B metals has been retained, but is only required if ocean discharges occur during any given year of the permit term.

Dilution factor

Effluent limitations in the Order for the Ocean Plan Table B constituents have been revised based on the application of a minimum initial dilution factor of 5 to 1 (seawater to effluent) resulting in effluent limitations that are less stringent than those within the previous permit. This modification was conducted in accordance with the anti-backsliding requirement exceptions as outlined in section III.C.6 of the Fact Sheet (Attachment F). The former Order, No. R3-2003-0051, previously did not allow any dilution. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. Conservative dilution factors have been applied to recently reissued ocean discharger permits for facilities with similar physical discharge conditions. To be consistent with similar facilities, this Order applies a conservative dilution factor of 5:1 based on the evaluation of an ocean discharge under similar physical conditions for a desalination facility permitted in the Los Angeles Region (Region 4). The application of the dilution factor to the Ragged Point cliff discharge is assumed conservative given the rapid and turbulent mixing of effluent with seawater along the cliff face below the discharge point subject to wave and tidal action.

Minor changes

The proposed Order also contains the following minor modifications form the previous permit:

The beneficial use designations within Table 5 of the Order have been revised to be more consistent with the Basin Plan. Specifically, the area of special biological significance (ASBS) designation was removed and the navigation (NAV) and rare, threatened or endangered species (RARE) designations were added pursuant to Table 2-2 of the Basin Plan for coastal waters between Point Pinos to Point Piedras Blancas. The facility and discharge locations are not within an ASBS.

Based on comments from Monterey Bay National Marine Sanctuary (MBNMS) staff on other draft NPDES permits, the Order requires notification of spills likely to enter ocean waters directly to MBNMS office. In addition, notations have been made throughout the Order identifying ocean discharges from the facility as being to the MBNMS.

Mass effluent limitations have been added to the Order to be consistent with the Ocean Plan. The mass limitations are redundant given they are based on the concentration limits and effluent flow rate (i.e., violation of a mass limitation will only occur if the concentration limit is exceeded). Mass based effluent limitations are intended to prevent dischargers from diluting wastewater with clean water to meet the concentration based limitations. This is primarily a concern for commercial or industrial dischargers for which a clean water supply is available. This is generally not a concern for private or municipal dischargers with limited water supplies as is generally the case in California.

The solids/biosolids monitoring requirements were also updated to be consistent with other NPDES permits.

COMMENTS

The Discharger (and Discharger's consultant) had no comments on the proposed Order. Written comments were only received from the MBNMS in a letter dated March 17, 2009. The MBNMS requested the Order be revised to require the Discharger to submit copies of annual monitoring reports directly to the MBNMS office and for the Water Board to send a copy of the approved permit to the MBNMS. The monitoring and reporting program (Attachment E) was modified to include submittal of the annual reports to the MBNMS.

RECOMMENDATION

Adopt Order R3-2009-0020 as proposed.

ATTACHMENTS

- 1. Proposed Order No. R3-2009-0020 and associated attachments
- 2. Waste Discharge Requirements Order No. R3-2003-0051
- 3. Monterey Bay National Marine Sanctuary May 17, 2009 comment letter

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