



HITACHI

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Nuclear Energy

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CA Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
Att: Vincent Christian

July 24, 2008

Subject: GE-Hitachi Nuclear Energy Americas, LLC Comments on Tentative Order for
Vallecitos Nuclear Center
Reference: Tentative Order from NPDES Water Division (File No:2199.9018)

Dear Mr. Christian,

This letter provides comments to the Tentative Order for Vallecitos Nuclear Center as requested by the letter from the NPDES Wastewater Division received June 20, 2008. Please review and if you need additional information, contact Latonya Mahlahla at 925-862-4360 or latonya.mahlahla@ge.com.

Comments from GE Hitachi Nuclear Energy:

The discharge prohibitions described in Section A prohibit discharge of wastewater at locations or in a manner different than that described in the findings of the order. GEH requests the following changes to better describe wastewater sources at the Vallecitos Nuclear Center Facility.

Findings:

Paragraph 1 describes the discharger as "General Electric Hitachi Nuclear Energy Americas, LLC." The legal entity and owner of the facility is "*GE-Hitachi Nuclear Energy Americas, LLC.*"

Paragraph 3 describes the sanitary wastewater disposal area size as approximately 2 acres of land. GEH requests authorization to dispose of the sanitary wastewater to any of the designated disposal areas identified in Figure 2, Site Map. GEH requests the following changes to paragraph 3, sentence 3:

"The discharger tests its sanitary effluent for compliance with discharges limitations before disposing of it onsite to through a sprinkler irrigation center to about ten acres of land to the disposal areas identified on Figure 2".

Paragraph 4 indicates that the source of industrial water is “once-through non-contact cooling water” from the Nuclear Test Reactor (NTR). Although NTR cooling water is the primary source of industrial water at Vallecitos Nuclear Center (VNC), industrial water is generated from other sources such as equipment chillers, boilers and other industrial processes at the Facility. The industrial water disposal area is described as approximately eight acres of land. GEH requests authorization to dispose of the industrial wastewater to any of the disposal areas identified in Figure 2 and authorization to use industrial water for landscape watering to other areas onsite. GEH requests the following changes to paragraph 4:

Revise sentence one as follows:

“The discharger produces about 76,000 liter per day (20,000 gallons per day) of once-through non-contact cooling water primarily from its nuclear test reactor.”

Insert the following after sentence one:

“Industrial water is also generated from other sources such as equipment chillers, boilers and other industrial processes at the Facility.”

Revise sentence three as follows:

“Waste 002 is stored in one of four 230,000-liter retention basins, pH adjusted if necessary, and tested for compliance with discharge limits prior to onsite disposal through a sprinkler irrigation system to about ten acres of land to the disposal areas identified in Figure 2.”

Insert the following sentence after sentence 3:

“After demonstrating compliance with discharge limitation Waste 002 may also be used for landscape watering to other areas onsite.”

The previous NPDES permit restricted combining sanitary and industrial wastewater. Although the tentative order does not prohibit mixing the wastewater sources, GEH requests additional language to be added to the order authorizing the facility to combine industrial and sanitary wastewater. GEH requests insertion of the following text after paragraph 4:

“Since the Facility does not discharge Waste 001 or Waste 002 offsite, there are no restrictions on combining sanitary and industrial wastewaters provided the facility can demonstrate compliance with the effluent limitation specified in this order”.

Paragraph 15 refers to the definition of nuisance conditions as defined in Section 13050(m)(1) of the California Water Code. Under the Water Code, to be a nuisance, a condition must meet all the requirements of Section 13050(m), not just (m)(1). GEH requests the following changes:

Change "Section 13050(m)(1) of the California Water Code" to "*Section 13050(m) of the California Water Code*" in paragraph 15 and in section A. Discharge Prohibitions, paragraph 5.

Section A. Discharge Prohibitions

Paragraph 4 states "There shall be no bypasses of any treatment processes for Waste 001." If an upset condition in the treatment process occurred, treatment could potentially be bypassed and the waste stored until the treatment process was restored. GEH requests the following changes to Section A.

Insert the following at the end of paragraph 4:

"In the event of a treatment process failure to Waste 001, waste should be stored until treatment can occur or an alternate disposal plan has been approved by the Water Board."

Paragraph 5:

The reference to "Section 13050(m)(1) of the California Water Code" should be changed to "*Section 13050(m) of the California Water Code*" as discussed above.

Section B. Effluent Limitations:

The tentative order contains an effluent concentration limit for nutrients in the form of NO₃ of 45 mg/l. Previously, effluent nutrients were limited by the nutrient demand of the vegetation in the irrigated area. GEH finds this approach to be less restrictive, while continuing to prevent degradation of the ground water. GEH request removal of the NO₃ as an effluent limit from Section B and insertion of the following in the order:

"The facility shall implement a nutrient management plan with ground water monitoring to ensure that the irrigation and subsequent biological processes are protective of the ground water quality".

Because of the change from the previous order, GEH will need approximately 90 days from adoption of this order to re-evaluate the current nutrient management plan and explore potential pre-treatment options to comply with the new NO₃ limit.

Section C. Provisions

Paragraph 1.iii. provides limitations on allowing "emergent, marginal and floating vegetation" within the disposal area. If this is intended to prohibit only "water plants" and not prohibiting the normally occurring grasses or other plants deliberately chosen to improve water quality, this would be sufficient. The terms emergent and marginal may have very different meanings depending on context and may need clarification. GEH request the following changes to Section C.

Revise paragraph 1.iii. as follows

"The disposal areas shall be maintained free of all emergent water, marginal and floating vegetation with the exception of normally occurring grasses and other plants, and..."

Attachment 3, Self-Monitoring Program:

GEH requests a change in the sampling frequency for the parameter total coliform from every batch discharged to monthly as described in Section 3, Effluent Monitoring.

The parameter Nitrate (as NO₃) indicates that the sample location is E-001. Paragraph 12 and Section B of the tentative order authorize the use of a weighted average from Waste 001 & Waste 002; therefore the sample location for NO₃ should be changed to include E-002. Suggested, "E-001 & E-002" as in the row for TDS.

Paragraph 6 requires the submittal of the annual monitoring report to the Regional Water Board no later than February 1 of each year. GEH requests a submittal date of March 1 of every year to provide a more comprehensive summary of environmental and radiological monitoring. This would change paragraph 6 to start, *"The discharger shall submit annual monitoring reports to the Regional Water Board no later than March 1 of each year."*

Please contact me at (925) 862-4344 if you have any questions or would like to discuss this matter further.

David W. Turner
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cc: M. Leik
L. Butler
E. Firestone