State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT

December 14, 2016

ITEM: 8

SUBJECT: WDR Issuance: Closure, Post-Closure Maintenance, and

Monitoring Requirements for Advanced Group 99-SJ, LLP and the County of Orange at the Forster Canyon Landfill, San Juan Capistrano, Orange County (Tentative Order No.

R9-2016-0149) (*Amy Grove*)

PURPOSE: To consider adoption of Tentative Order No. R9-2016-0140

RECOMMENDATION: Adoption of Tentative Order No. R9-2016-0149 is

recommended (Supporting Document No. 2).

KEY ISSUES:

1. The tentative Order identifies the County of Orange, and

Advanced Group 99-SJ, LLP (AG 99-SJ) as Dischargers because the county was a former operator and AG 99-SJ

is the current owner of the Forster Canyon Landfill.

2. The Dischargers will construct and maintain a permanent dewatering system for the purpose of

enhancing the stability of the underlying Forster Canyon

Landslide.

3. The tentative Order requires AG 99-SJ to establish a

financial district to collect, manage, and allocate funds for post-closure maintenance, monitoring, and corrective

actions as needed.

PRACTICAL VISION: Controlling discharges of wastes through the issuance of

effective waste discharge requirements (WDRs) is an essential component of the strategy to achieve healthy

waters in the San Diego Region.

DISCUSSION:

The Forster Canyon Landfill (Landfill) is an unlined municipal solid waste landfill that no longer accepts wastes. The Landfill is located in southern Orange County. The property on which the landfill is situated is currently owned by AG 99-SJ, a limited liability partnership (LLP), which is developing the land surrounding the Landfill into a master planned community. The Landfill was operated by the County of Orange through a lease agreement with the party that owned the property from 1958 to 1974. The Landfill contains approximately 2.5 to 3.0 million cubic yards of solid waste. Both AG 99-SJ (the current owner) and the County of Orange (the former operator) are responsible for complying with the tentative Order.

The applicable State regulations¹ define waste management units that became inactive or closed prior to November 1984 as "Closed Abandoned, or Inactive (CAI) Units." By that definition, the Forster Canyon Landfill qualifies as a CAI Unit, thereby limiting the prescriptive closure and post-closure maintenance requirements that can be imposed on the Dischargers. The tentative Order and attachments contain mainly performance-based maintenance requirements, while imposing a detection groundwater monitoring and reporting program, as allowed by State regulations.

The San Diego Water Board adopted general waste discharge requirements (WDRs)² in 2012 for CAI Units located in the San Diego Region. Many of the requirements in the tentative Order are modeled after the requirements established for CAI Units in the general WDRs. However, due to the complexities associated with the Forster Canyon Landfill, the general WDRs are not adequate to protect water quality. Closing and maintaining the Forster Canyon Landfill are complicated by the need for a permanent groundwater dewatering system and slope stability monitoring system, and because some wastes in the Landfill must be relocated

¹ Title 27, California Code of Regulations.

² General Order No. R9-2012-0001:

to accommodate the proposed adjacent redevelopment project.

The closure of the Forster Canyon Landfill is part of a larger Master Planned Community redevelopment project called Distrito La Novia-San Juan Meadows. Closure of the Landfill entails removal of an estimated 250,000 cubic yards of waste and soil from the perimeter of the landfill and relocation of those wastes elsewhere at the landfill. Closure of the Landfill also entails constructing a landfill cover system to contain the wastes to ensure the health and safety of future residents of the redevelopment project. Monitoring of slope stability, groundwater quality, and landfill gas production from the decomposition of the wastes is also necessary for health and safety reasons.

The Landfill is located above the Forster Canyon Landslide, a 300-acre landslide that failed approximately 20,000 years ago. The slip surface of the Forster Canyon Landslide intersects groundwater beneath the Landfill, and the Dischargers' concluded that the stability of the landfill could be enhanced by the construction and operation of a permanent dewatering system. The proposed dewatering system is designed to lower groundwater elevations to prevent groundwater from reaching the landslide slip surface and potentially reactivating movement of the Forster Canyon Landslide.

The San Diego Water Board does not typically require proof of financial assurances for CAI Units. In most cases these sites are owned by local municipalities that have dedicated funds to cover costs associated with the long-term maintenance and monitoring of legacy landfills. However in this case the owners are an LLP. Because of the surrounding development and the long-term complexities involved in maintaining the site, the San Diego Water Board is judiciously exercising its authority to require proof of financial assurances for the long-term maintenance and monitoring of the Forster Canyon Landfill.

In response to the San Diego Water Board's requirement for establishing financial assurances, the AG 99-SJ proposed the establishment of a Geologic Hazard Abatement District (GHAD), a publicly financed assessment entity that will be responsible for collecting, managing, and allocating funds for post-closure maintenance, monitoring, and corrective actions should there be a release of wastes, or waste degradation products from the Landfill. Funds necessary for closure of the Landfill will be provided by the Dischargers through a settlement agreement established by the two entities. AG 99-SJ will have one year from the completion of construction of the final cover system, to establish the GHAD.

Additional information on all of the topics discussed above may be found in the Information Sheet in Attachment C of Order No. R9-2016-0149 (Supporting Document No. 2).

In response to the Public Notice for this item, AG 99-SJ and Orange County Waste and Recycling, submitted comments on the tentative Order and attachments. The letters, dated November 8, and November 9, 2016 are Supporting Documents Nos. 4 and 5, respectively. Responses to comments are provided in Supporting Document No. 6. The Dischargers provided a variety of comments, and when the proposed text revisions were consistent with the Water Code and State regulations, those changes were incorporated in the Order and its attachments (Supporting Document No. 7). Many of the proposed changes requested additional flexibility in the event that conditions arise either during closure, or post-closure maintenance and monitoring that might warrant minor changes to the specified requirements. In a few instances, the proposed changes were not considered protective of the environment or consistent with applicable regulations, and staff provided an explanation for rejecting the proposed revisions.

LEGAL CONCERNS: None.

SIGNIFICANT CHANGES:

 The tentative Order requires the Dischargers to implement a detection groundwater monitoring and reporting program (M&RP) that includes the incorporation of statistical analysis of groundwater monitoring data in order to ensure early detection of a release of waste constituents from the Forster Canyon Landfill.

- Closure of the Landfill includes the excavation of approximately 250,000 cubic yards of waste and soil from the Landfill's perimeter and relocation of that waste to the front face of the Landfill.
- 3. The Dischargers must monitor the stability of the front face of the landfill during closure and throughout the post-closure maintenance period.
- 4. The Dischargers will construct, maintain, and operate a permanent dewatering system to lower groundwater levels for the purpose of enhancing the stability of the underlying Forster Canyon Landslide.
- 5. The Dischargers must implement best management practices and construct other erosion and drainage control features for storm water management.
- 6. The Dischargers must submit a Site Certification Report, on an annual schedule, reporting the site maintenance activities completed during the dry season to prepare the Landfill for the rainy season and maintain compliance with applicable performance standards.
- 7. The Dischargers must establish financial assurances to cover the costs associated with post-closure maintenance, monitoring, and potential corrective actions at the Forster Canyon Landfill.
- 8. The Dischargers must conduct vadose zone monitoring, in the form of landfill gas monitoring, as established by CalRecycle and the Orange County Department of

Environmental Health, Local Enforcement Agency (Orange County LEA).

COMPLIANCE RECORD:

Between 1991 and 2002, the San Diego Water Board issued a series of staff enforcement letters and notices of violations (NOVs) for maintenance violations and site security concerns. The Dischargers have corrected these issues and the Landfill is currently in compliance with WDR Order No. 94-106, as amended.

SUPPORTING DOCUMENTS:

- 1. Development Project Map.
- 2. Tentative Order No. R9-2016-0149, with attachments (clean copy).
- 3. Transmittal Letter and Notice of Public Hearing.
- 4. Comment Letter from AG-99 SJ.
- 5. Comment Letter from Orange County Waste & Recycling.
- 6. Responses to Comments.
- 7. Modifications to Tentative Order No. R9-2016-0149, with attachments, in underline-strikeout text.

PUBLIC NOTICE:

Notification of this action was sent to known interested parties on September 22, 2016 (Supporting Document No. 3). The Tentative Order was also posted on the San Diego Water Board website on September 23, 2016.