**San Diego County Water Authority**
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April 15, 2013



U.S. Army Corps of Engineers, Los Angeles District
Regulatory Division, Carlsbad Field Office
ATTN: Gregory Canyon EIS
Los Angeles District, South Coast Branch
6010 Hidden Valley Road, Suite 105
Carlsbad, California 92011

Re: Draft Environmental Impact Statement for the Proposed Gregory Canyon Landfill, San Diego County, California

Dear Sir/Madam:

The San Diego County Water Authority (Water Authority) is submitting the following comments on the U.S. Army Corps of Engineers (Corps) Draft Environmental Impact Report (EIS) prepared for the proposed Gregory Canyon Landfill project in response to Public Notice/Application No: SPL-2010-00354-WHM. The proposed Class III landfill would be located approximately 3 miles east of Interstate 15, and south of State Route 76 on approximately 308 acres within a 1,770 acre site. The project would include the landfill, borrow/stockpile areas, haul roads, ancillary facilities, access road, and bridge across the San Luis Rey River, and modifications to State Route 76 in the vicinity of its intersection with the project's access road.

The Water Authority goal for participating in the Corps public hearing held on January 31, 2013, and providing written comments is to ensure that the Final EIS, and any resulting Clean Water Act Section 404 permit, minimizes risks to regionally important local water resources and essential regional water conveyance infrastructure, and adequately addresses regional socioeconomics in event of damage and disruption of water supplies due to landfill construction and operations.

Water Authority Background:

The Water Authority is a local governmental entity responsible for providing a safe and reliable imported water supply to its 24 member agencies serving the San Diego region's $186 billion economy and its approximately 3 million residents. The Water Authority, by State legislative mandate, is the authoritative expert on the San Diego regions' water supply reliability and long-term water supply planning. The Water

Authority imports up to 90 percent of the water used in the San Diego region through five larger diameter pipelines. The source of imported water is the California State Water Project and Colorado River.

The Water Authority and The Metropolitan Water District of Southern California own and operate Pipelines 1 and 2 which are located in a pipeline right of way (easement) called the First San Diego Aqueduct. The Water Authority ownership, operation, and maintenance obligations begin on the north side of State Route 76 and extend southerly through the Gregory Canyon Landfill project site, essentially bisecting property into eastern and western zones. Pipelines 1 and 2 are each 48-inch in diameter, operate at higher pressure (about 400 pounds per square inch) than many other Water Authority pipelines, and were constructed in 1948 and 1952, respectively. These two pipelines current design capacity is 180 cubic feet per second (cfs); 90 cfs for each pipeline. Both pipelines must be in almost continuous operation to meet San Diego's current treated water demands.

The Water Authority's planned Pipeline 6 is an additional 9-10 foot diameter pipeline designed to convey imported water into the San Diego Region that would also cross the Gregory Canyon project site adjacent to the First San Diego Aqueduct right-of-way. The Pipeline 6 project completed the planning process in the 1990s, resulting in an approved and certified Final Environmental Impact Report (EIR) prepared in conformance with the California Environmental Quality Act. Construction of Pipeline 6 has not yet commenced.

General Comments

Throughout the approximately two decades the landfill project has pursued approvals, the Water Authority has consistently voiced two main concerns: 1) protection of local surface and ground water, and 2) protection of existing treated water Pipelines 1 and 2 (and future Pipeline 6), which are located in the landfill area.

1. The landfill site is immediately adjacent to the San Luis Rey River and sits atop and upstream of groundwater basins currently used as a source of local supply, and which are expected to be expanded in the future. Should these supplies become contaminated, either additional water treatment costs will be incurred by current users, or the Water Authority will be tasked to provide replacement water. This concern was noted in our scoping letter to Dr. Spencer MacNeil dated June 18, 2010, along with a request that the Draft EIS present an analysis of these potential effects.

**The Draft EIS does not include the requested analysis regarding the impacts of the potential loss of this local supply, or provide adequate mitigation to compensate for additional treatment or replacement costs should surface and ground water become unusable in the future. We reiterate our request that the Final EIS contain a thorough analysis of additional treatment and/or replacement (including acquisition and distribution) costs for contaminated local water resources.**

2. As noted above, the landfill site is bisected by the First San Diego Aqueduct. The proposed landfill and borrow areas are immediately adjacent to existing pipelines which could be damaged by repeated nearby blasting and excavation, or the repeated heavy vehicle crossings expected during landfill construction and operations. The applicant's preferred alternative proposes to leave the pipelines in place, but also describes a relocation "option".

**The Draft EIS does not contain an analysis of impacts to the regional water distribution system, including pipeline repair and socioeconomic impacts, in the event the imported water supplies are disrupted due to landfill construction and operations. We request the Final EIS contain this analysis so the public and decision makers can fully evaluate the risk posed by this project.**

**It also does not contain an adequate analysis of long-term blasting on the adjacent existing 60-year old pipelines, nor does it include an analysis of the approved, but not yet built, Pipeline 6 planned for this same right of way. We request this blasting analysis be prepared and included in the Final EIS.**

**In addition, the Draft EIS does not contain sufficient technical details on the possible pipeline relocation option, including design, construction, schedule, or operation, to determine if it is compatible with or appropriate for the existing Water Authority conveyance system. We request that the Final EIS provide additional details on proposed pipeline design, including a hydraulic/transient analysis by a licensed California engineer, to determine the potential for reduced operations and increased maintenance.**

The voter approved Proposition C - Gregory Canyon Landfill and Recycling Collection Center Ordinance; Section 3 - Description of the Project, subsection G - Protection of San Diego Aqueduct states: "The project will include work required to protect any San Diego Aqueduct pipelines to the extent and in the manner required by the San Diego County Water Authority". To date, the Water Authority has not entered into an agreement with the project applicant that sets forth the extent or the

manner for protecting San Diego Aqueduct pipelines. The Corps should include this requirement in any authorizations or approvals for this project.

Currently, the Water Authority believes relocation of Pipelines 1 and 2, and their associated right of way, to a new alignment outside the perimeter of all proposed landfill construction and operational areas, at the project applicant's sole expense, is the only method to fully ensure protection of these essential pipelines from risks associated with landfill development and operations.

Detailed Comments

1. Page ES-12 states that 3,200 feet of Water Authority pipeline maybe relocated as an "optional" project component.
   *Comment: The Water Authority has not agreed to the proposed length and/or alignment of the pipeline relocation option as described. Additional technical engineering studies will be required to determine the adequacy of this project component to satisfy Water Authority concerns.*

2. Figure 1-1 shows Borrow Area B overlying the Water Authority right of way.
   *Comment: The pipeline right of way is not available as soils borrow area. Delete all shading that denotes Borrow Area B within the Water Authority right of way.*

3. Page 1-5 infers that Borrow Area B includes the Water Authority right of way.
   *Comment: Correct the text to clarify that the Water Authority right of way is not available as a soil borrow area. No soil excavation or storage may occur on the right of way due to pipeline loading concerns. In addition, the Water Authority recommends that no excavation be allowed to occur within 30 feet of the edge of the right of way.*

4. Page 1-6 states that haul roads crossing the aqueduct will be engineered.
   *Comment: Correct the text to state that Water Authority review and approval of any proposed engineered haul roads crossing the aqueduct will be required.*

5. Table 1-2 does not name the Water Authority as a required Local/County permitting entity.
   *Comment: Add the Water Authority Encroachment Permit to the list of permits/approvals required for the project.*

6. Table 1-3 lists relining or encasement as alternatives to protect Water Authority pipelines.

*Comment: The Water Authority has not evaluated or approved either of these options as alternatives to relocation. Additional technical engineering studies will be required to determine the adequacy of these alternative project components to satisfy Water Authority concerns.*

7. Page 3-2 acknowledges the existing easement for Pipelines 1 and 2 (First San Diego Aqueduct), but does not acknowledge the approved, but not yet built, Pipeline 6 in this same pipeline alignment.

*Comment: Verify that the Pipeline 6 project was considered in the analysis, and correct the text to state that Pipeline 6 has been approved for this same alignment. If Pipeline 6 was not considered, revise the analysis to include this Water Authority pipeline as an approved, but not yet constructed, facility.*

8. Page 3-2 states the Water Authority pipelines are approximately 10 to 15 feet below ground surface.

*Comment: The DEIS overstates the depth of cover. In many places, the pipelines are only 3 to 5 feet deep and, at times, have been exposed on the existing access road adjacent to the landfill project. Correct the text to state that the pipelines may be as shallow as 3 feet. The Water Authority will work with the applicant and Corps to define actual pipeline depths if requested.*

9. Page 3-17 infers that excavation and soil stockpiling of Borrow Area B is contemplated within the Water Authority right of way, and that haul roads will consist of concrete slab over polystyrene.

*Comment: Correct the text to state that excavation and soil stockpiling will not occur within the Water Authority right of way. Further, add text that excavation plans adjacent to the right of way, and all haul road crossings will require approval by the Water Authority before commencing construction.*

10. Page 3-18 states that haul roads crossing the Water Authority right of way will consist of concrete slab over polystyrene.

*Comment: The Water Authority has not determined if concrete slab over polystyrene provides an acceptable level of protection for existing pipelines. Correct the text to state that all haul road crossings will require approval by the Water Authority before commencing construction.*

11. Page 3-28 infers that habitat mitigation may occur on the Water Authority right of way.

*Comment: Correct the text to specifically state that habitat mitigation will not occur within the Water Authority right of way without prior written approval by the Water Authority.*

12. Figure 3-13 shows habitat restoration shading on the Water Authority right of way.

*Comment: Note on the figure that any habitat restoration within the Water Authority right of way must be consistent with the Water Authority's approved and permitted Subregional Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and approved by the Water Authority prior to commencing construction.*

13. Page 3-32 states the "SDCWA has expressed an interest in potential relocation... of these pipelines".

*Comment: The Water Authority believes relocation of Pipelines 1 and 2, and their associated right of way, to a new alignment outside the perimeter of all proposed landfill construction and operational areas, at the project applicant's sole expense, is the only method to fully ensure protection of these essential pipelines.*

14. Page 3-32 (footnote) states that additional pipeline relocation studies are underway.

*Comment: The Water Authority is unaware of the scope or nature of any additional pipeline relocation studies. If such studies are completed before the Final EIS is published, the results should be provided to the Water Authority and incorporated into the Final EIS.*

15. Pages 3-37 through 3-41 do not list pipeline relocation activities as part of construction activities, nor do they provide a construction schedule for the relocation "option".

*Comment: Add pipeline relocation activities and a construction schedule for the relocation option so the entire potential project schedule is presented. Should the relocation option be pursued, temporary shutdown of the existing pipelines to connect any relocated segments will require long-term schedule coordination with the Metropolitan Water District of Southern California and various Water Authority member agencies.*

16. Page 3-39 does not mention the need to obtain a Water Authority Encroachment Permit or the need to protect the pipelines from construction equipment crossings.

*Comment: Correct the text to state that the Water Authority must issue an Encroachment Permit before the project can begin construction, and that all roads crossing the Water Authority right of way will require written approval by the Water Authority before commencing construction.*

17. Page 3-41 states that periodic blasting will occur within the landfill footprint.

*Comment: Correct the text to include the specific criteria used to evaluate blasting impacts. Further, additional text related to analysis and conclusions of long-term blasting effects (during the entire term of landfill operation) on the nearby pipelines should be included.*

18. Figure 3-20 shows the perimeter drainage channel crossing the Water Authority right of way.

*Comment: Similar to the haul roads, crossing the pipeline right of way with a drainage channel will require Water Authority issuance of an Encroachment Permit and approval of the drainage channel design. Correct the text to state that Water Authority review and written approval of any proposed drainage channel crossing the right of way will be required before commencing construction.*

19. Page 3-61 states the perimeter drains will be sized to contain the 24-hour storm event and the simultaneous rupture of the aqueduct pipelines.

*Comment: It is unclear if the approved, but not yet built, Pipeline 6 was considered in sizing the perimeter drains. Pipeline 6 is designed to be 108-inches in diameter with a capacity of approximately 500 cubic feet per second. Verify that the proposed capacity of the perimeter drain includes the volume of Pipeline 6 and correct the text to clarify if the volume was included. If not, revise the analysis to include the volume that Pipeline 6 would contribute to the perimeter drains and detention basins.*

20. Page 3-65 states that the perimeter drain and drainage pipeline will cross the Water Authority right of way.

*Comment: See comment 18 above.*

21. Page 3-75 does not include an analysis of the possible effects of methane gas on the pipelines.

*Comment: Provide an analysis of the potential for methane gas to degrade the nearby pipelines should it migrate to the right of way. Sections of Pipelines 1*

*and 2 from the San Luis Rey River southward to elevation 761 feet above sea level are constructed of welded steel pipe with exterior mortar coating; sections beyond this point are constructed of reinforced concrete cylinder pipe.*

*Also, correct the text to include an assessment of the potential for methane to affect Water Authority routine operations and maintenance on the pipelines (e.g., explosion potential from sparks, hazardous atmosphere in structures, etc.). The Final EIS should include a figure showing the location of the 14 methane monitoring probes. The Water Authority requests that at least one monitoring probe be sited next to the eastern edge of the Water Authority right of way, between the landfill and the pipelines to provide advance warning of methane migration.*

22. Page 3-75 infers that a 150 foot firebreak around the landfill perimeter will include the Water Authority right of way.

*Comment: The Water Authority's approved HCP/NCCP specifies land management practices within right of way. If the project applicant desires to use the Water Authority right of way as a firebreak, the Water Authority will prepare a HCP/NCCP consistency determination; however, the applicant may be required to provide additional offsite compensatory mitigation for any long-term or permanent effects of the firebreak.*

23. Page 3-78 states that residents within one mile radius of the blast site will receive written blasting notice 24-hours in advance of blasting activities.

*Comment: Correct the text to add the Water Authority as a recipient of all blasting notices.*

24. Page 3-95 states Borrow Area B will be reclaimed by grading and hydroseeding to prevent erosion.

*Comment: Correct the text to clarify that grading or hydroseeding will not occur in the Water Authority right of way without written approval from the Water Authority. Adequate restoration details have not been included to evaluate potential long-term effects on the adjacent Water Authority right of way. Correct the text to include restoration details that show the final grades adjacent to the right of way and verify the proposed seed mix is compatible with the Water Authority's approved HCP/NCCP.*

25. Page 4.1-10, Design Feature 4.13.9a states that Borrow Area B will be graded to minimize aesthetic impacts.

*Comment: Correct the text to clarify that grading will not occur in the Water Authority right of way. Further, the description does not contain sufficient topographic information to ensure grading adjacent to the right of way will be adequate to protect the pipelines from future erosion or landslides. Correct the text to include a description of any grading limitations adjacent to the right of way to ensure the pipelines are protected. The Water Authority recommends that no excavation or grading be allowed to occur within 30 feet of the edge of the right of way.*

26. Page 4.1.10, Design Feature 4.13.12b states the Water Authority right of way will be revegetated.

*Comment: Correct the text to include a requirement that any revegetation plan proposed for the Water Authority right of way must be consistent with the Water Authority's approved HCP/NCCP and written approval provided by the Water Authority prior to implementation.*

27. Page 4.1.10, Design Feature 4.13.12c states that relocated vents or portals will be colored to blend with surroundings.

*Comment: The method of coloration should be non-toxic and selected to minimize long-term maintenance requirements. Because colored structures require additional periodic maintenance, the project applicant should be required to fund an endowment to perpetually maintain the required coloration.*

28. Page 4.1.19 infers that tree planting for visual screening will occur in the Water Authority right of way.

*Comment: Planting trees in the Water Authority right of way requires issuance of an Encroachment Permit. Further, the Water Authority maintains a list of trees approved for planting in the right of way. Correct the text to state that an Encroachment Permit will be obtained from the Water Authority before planting any trees and that all such trees planted will conform to the approved species list and the Water Authority's HCP/NCCP.*

29. Page 4.1.24, First San Diego Relocation Option, states that the project "will result in significant adverse effects".

*Comment: Based on the associated analysis, correct the text to read "not result in significant adverse effects".*

30. Page 4.3-57 does not specifically state that construction emission estimates include pipeline relocation activities.

*Comment: It is unclear if the construction emission estimates include those associated with the pipeline relocation option. Verify that the estimates include the pipeline relocation option and correct the text to clarify if the emissions were included. If not already included, revise the data to include expected emissions associated with the pipeline relocation option.*

31. Page 4.4-29 lists the biological resource design features associated with the First Aqueduct Relocation option.

*Comment: It is unclear if activities to minimize effects to biological resources within the Water Authority right of way are consistent with the approved Water Authority HCP/NCCP. Correct the text to clarify that the Water Authority HCP/NCCP governs all activities in the Water Authority right of way.*

32. Page 4.4-69 and 4.4-70 state that biological impacts to the North County Plan are not significant.

*Comment: The analysis does not mention possible adverse effects on the approved Water Authority HCP/NCCP. Correct the text to include an analysis regarding consistency with the Water Authority HCP/NCCP. If the project results in significant biological effects to the Water Authority HCP/NCCP, mitigation should be proposed.*

33. Page 4.4-70 states that biological mitigation will be consistent with the Water Authority's HCP/NCCP, if applicable, or the North County Plan.

*Comment: Correct the text to state that the Water Authority HCP/NCCP governs all activities occurring within the Water Authority right of way.*

34. Page 4.4-70 states that mitigation measure Gregory Bio-9 for non-native grassland will only be implemented if the North County Plan is used.

*Comment: See Comment 33 above.*

35. Page 4.5.1-22 states the First San Diego Aqueduct was determined "eligible for listing in the National Register" as a historic resource.

*Comment: It is unclear if the Historic American Engineering Report would still be required if the pipeline relocation option was pursued and the existing pipeline was abandoned in place. Correct the text to clarify the applicant's documentation obligation.*

36. Page 4.7-9 states haul roads crossing the Water Authority right of way will be concrete slab over polystyrene.

*Comment: See comment 10 above.*

37. Page 4.7-11 states stockpile slopes on borrow areas will be 3:1 and up to 300 feet high.

*Comment: See comments 3 and 25 above.*

38. Page 4.7-13 states haul roads crossing the Water Authority right of way will be concrete slab over polystyrene, and cut slopes will be 2:1.

*Comment: See comments 10 and 25 above.*

39. Page 4.8-15 states that surface runoff will be directed through drainage channels into detention basins.

*Comment: Provide an analysis that includes the potential for landfill erosion and trash washout resulting from ruptured pipelines (including the approved but not yet constructed Pipeline 6). Correct the text to include this analysis and provide suitable mitigation to prevent trash from leaving the landfill site.*

*In addition, it is unclear if detention basin design is adequate to contain the 24-hour storm event concurrent with a simultaneous rupture of existing Pipelines 1 and 2, and future Pipeline 6. Correct the text to verify the detention basin is appropriately sized to contain the combined water volumes associated with a 24-hour storm event and a simultaneous rupture of Pipelines 1, 2, and 6.*

40. Page 4.8-16 states that there are no significant waterborne threats to human health and safety.

*Comment: It is unclear if the analysis and conclusion includes the possible health effects of contaminated ground water infiltration into nearby pipelines that are periodically depressurized (shutdown) for routine inspection and maintenance. Correct the text to include an analysis of the potential for contaminated ground water to enter the pipelines when out of service. In addition, correct the text to include any discussions or concerns raised by the Department of Health Services regarding the proximity of the landfill to Water Authority pipelines*

41. Page 4.9-20 states the landfill project will use groundwater as the primary water source for construction, operation and closure activities.

*Comment: It is unclear if the groundwater analysis includes potential subsidence impacts on adjacent Water Authority pipelines and soils. Correct the text to include this analysis and provide suitable mitigation to prevent such impacts.*

42. Page 4.9-23 states that decomposition processes in the landfill will generate leachate, a solution of water and contaminants, which poses a threat to water sources if it migrates offsite.

*Comment: Provide an analysis that includes the potential for leachate to attack and compromise the nearby buried pipelines should the landfill liner leak. Correct the text to include this analysis and provide suitable mitigation to prevent such an occurrence. Suitable mitigation may include installation of facilities between the landfill and the Water Authority pipelines to direct subsurface flows away from the pipeline (e.g., drains, encasements, impervious barriers, etc.).*

43. Page 4.10-12 states that an agreement with the Water Authority regarding pipeline relocation and protection is a project design feature.

*Comment: As stated in the County of San Diego Solid Waste Facility Permit, the Water Authority agrees that a written agreement between the project applicant and the Water Authority "to protect any San Diego Aqueduct pipelines to the extent and in the manner required by the San Diego County Water Authority" is required before the project commences construction and should be incorporated as a requirement in any 404 permit.*

44. Page 4.11-2 neglects to cite compliance with the Water Authority vibration limits as a regional standard.

*Comment: Correct the text to include the Water Authority vibration standards and verify that the analysis considered those standards. Note, however, that the Water Authority standards are for infrequent or "one-time" exposures, and not for repeated or long-term exposures. The applicant should be required to prepare a technical study on the impacts long-term blasting and associated vibration will have on Water Authority pipelines.*

45. Page 4.11-19 states that 5 foot high berms will be placed on the southern edge of Borrow Area B to block noise from residences.

*Comment: It is unclear if the proposed noise attenuation berms will cross the Water Authority right of way. Correct the text to state that the right of way is*

*not available for soil stockpiles, including berms. Any proposed use of the right of way will require issuance of an Encroachment Permit by the Water Authority.*

46. Pages 4.11-33 through 35 state that there are no vibration impacts to the Water Authority pipelines from blasting.

*Comment: The Water Authority is unable to support this conclusion. There is no analysis of long-term, repeated (chronic) effects of blasting on the nearby pipelines. The Water Authority previously requested the project applicant to undertake such a study, but it has not occurred to date. Consequently, the Water Authority believes relocation of Pipelines 1 and 2, and their associated right of way, to a new alignment outside the perimeter of all proposed landfill construction and operational areas, at the project applicant's sole expense, is the only method to fully ensure protection of these essential pipelines.*

47. Page 4.11-37 states that a 500 foot distance will prevent impacts to pipeline at 18Hz.

*Comment: The 500 foot distance previously provided by the Water Authority pertained exclusively to single blasting events. As noted in comment 46, data is inconclusive as to whether 500 feet is an adequate distance to ensure pipeline protection from the long-term blasting contemplated during landfill construction and operation.*

48. Page 4.11-37 concludes that there will be no significant adverse vibration impacts resulting from the applicant's proposed alternative.

*Comment: See comments 46 and 47 above.*

49. Page 4.12.1-5 states that landfill contractors will "be shared" to construct relocated pipelines.

*Comment: The Water Authority has not agreed to this approach. Correct the text to state that any pipeline relocation will be performed by a licensed and qualified pipeline contractor approved in writing by the Water Authority.*

50. Page 4.12.3-3 states that landfill contractors will "be shared" to construct relocated pipelines.

*Comment: See comment 49 above.*

51. Page 4.12.4-11 states that landfill contractors will "be shared" to construct relocated pipelines.

*Comment: See comment 49 above.*

52. Table 6.1 does not list the approved, but not yet constructed, Pipeline 6 as a cumulative project.

*Comment: Add Pipeline 6 to the table for the purposes of cumulative analysis and revise the analysis, conclusions and mitigation as necessary to reflect the addition of Pipeline 6.*

The Water Authority appreciates the opportunity to review the proposed project and provide comments on the Draft EIS. As noted above, the Water Authority requires additional information to determine if the project described in the Draft EIS can avoid placing the San Diego regional water system at risk.

Please retain the Water Authority on your mailing list to receive future notifications or documents regarding this project. If you have questions or wish to discuss any of the above concerns in greater detail, please contact Larry Purcell, Water Resources Manager at (858) 522-6752, or by email at lpurcell@sdcwa.org.

Sincerely,

Frank Belock, Jr.
Deputy General Manager