

DJ Moore  
(213) 891-7758  
dj.moore@lw.com

355 South Grand Avenue, Suite 100  
Los Angeles, California 90071-1560  
Tel: +1.213.485.1234 Fax: +1.213.891.8763  
www.lw.com

## LATHAM & WATKINS LLP

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May 19, 2021

### VIA E-MAIL

Mr. Tom Luster  
California Coastal Commission  
Energy and Ocean Resources Unit  
445 Market Street, Suite 300  
San Francisco, CA 94105

Re: Monterey Peninsula Water Supply Project, Coastal Development Permit Application No. 9-20-0603 – Response to April 2, 2021, Letter re: Notice of Incomplete Application

Dear Mr. Luster:

Enclosed please find California-American Water Company's ("Cal-Am") supplemental response to Coastal Commission Staff's December 3, 2020, Notice of Incomplete Application ("NOI") and April 2, 2021, letter related to Cal-Am's application for a Coastal Development Permit ("CDP") for the proposed Monterey Peninsula Water Supply Project ("Project").

The enclosed response provides detailed answers to Staff's remaining questions, which are summarized below.

- ***The Project's offshore components.*** The proposed modifications to Monterey One Water's ("M1W") outfall diffusers and pipeline are not functionally related components of the Project to be performed by the same applicant. M1W—not Cal-Am—owns and operates the outfall. Absent a property interest in the outfall, Cal-Am cannot add potential modifications to the outfall to its CDP application. M1W will submit a CDP application separately for work to the outfall.
- ***The Project's well locations.*** It is speculative whether Cal-Am will need to relocate the Project's slant wells due to coastal hazards. Under worst case scenarios, only two of the Project's seven wells are at risk of sand burial within 20 to 25 years. Although the Project will be constructed with seven wells for reliability purposes, only five are needed to maintain the Project's water deliveries. Thus, in the very unlikely event that the two wells are impacted by coastal hazards and cannot be replaced in the same locations, Cal-Am could decommission the wells and continue Project operations. Nevertheless, Cal-Am proposes a Special Condition to be added to the CDP that would limit slant well operations to an initial 25-year term and require Cal-Am to

submit an application to the Commission to amend the CDP no later than the start of the 24th year of the initial term to address coastal hazard risks.

- ***Water distribution pipeline.*** Pursuant to an agreement with Marina Coast Water District (“MCWD”), Cal-Am can use the pipeline it shares with MCWD to distribute Project water. Further, M1W recently certified a Supplemental Environmental Impact Report for an expansion of the Pure Water Monterey Groundwater Replenishment Project, which includes an additional Cal-Am owned water transmission pipeline that Cal-Am can use to distribute Project and other water supplies as needed. As such, Cal-Am has several available options for a water distribution pipeline.
- ***Vernal Ponds.*** Seven months of data collection and monitoring confirm Geoscience Support Services’ previous conclusions and reports submitted to Staff that the vernal ponds at Armstrong Ranch within the California Department of Transportation right-of-way do not depend on groundwater from the Dune Sand Aquifer. Rather, the vegetation in the Armstrong Ranch ponds depends on a shallower water-bearing unit that is hydraulically disconnected from the Dune Sand Aquifer. Therefore, Project pumping will not adversely affect these ponds.

We appreciate Staff’s time and attention to Cal-Am’s application and responses to the NOI. The Project is important for meeting the Monterey Peninsula’s urgent water supply and reliability needs. Because Cal-Am has provided the information necessary for Staff to assess Cal-Am’s CDP application for the Project, we request that Staff find the application to be complete so the matter can be set for hearing before the Commission.

Very truly yours,



Duncan Joseph Moore  
of LATHAM & WATKINS LLP

Enclosures

cc: Ian Crooks, Cal-Am  
Kathryn Horning, Cal-Am  
Winston Stromberg, Latham & Watkins LLP

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**I. ITEM 6 – OUTFALL DIFFUSER**

*. . . Please identify the specific outfall modifications that Cal-Am and MIW have identified as necessary to allow conformity to water quality objectives and describe the activities needed to implement those agreed-upon modifications. Please also provide documentation of MIW’s commitment to submit the necessary CDP application on Cal-Am’s behalf and the expected timing of MIW’s submittal of that CDP application. That CDP, along with any other permits needed for these modifications, should also be included in an updated list of required permits . . . . If MIW has not yet committed to submit the needed CDP or has not identified the specific modifications it would implement, we request that Cal-Am include that information as part of its application. These diffuser modifications would be functionally related to Cal-Am’s overall project . . . .*

**Applicant Response:**

Potential modifications to MIW’s outfall diffusers are not part of Cal-Am’s CDP application because they are not functionally related components of the Monterey Peninsula Water Supply Project (“Project”) to be performed by the same applicant. MIW, as the owner of the outfall, would submit a separate CDP application for any potential modifications to the outfall diffusers.

The Coastal Act regulations provide that, “[t]o the maximum extent feasible, functionally related developments **to be performed by the same applicant** shall be the subject of a single permit application.” (14 Cal. Code Regs., § 13053.4 [emphasis added].) Neither the Coastal Act nor the Coastal Act regulations define “functionally related development.” In other contexts, “functionally related” means “operationally interdependent or normally used together in the performance of a single procedure” (22 Cal. Code Regs., § 90038 [Social Security Health Planning & Resources Development]), and “interrelated and interdependent.” (*Manduley v. Superior Court* (2002) 27 Cal.4th 537, 588 [voter initiative context].)

Commission precedent supports interpreting “functionally related” as interdependent projects **proposed by the same applicant**, as explained below:

- The City of Los Angeles approved a large, multi-phase development that would occur largely outside the Coastal Zone (the “Playa Vista Project”). In approving the Playa Vista Project, the City required the applicant to construct three road improvements within the Coastal Zone as mitigation. The applicant submitted several CDP applications to the Commission for those road improvement projects. Staff determined that the road improvement projects required for the Playa Vista Project and proposed to be implemented by the same applicant were “functionally related” and, thus, should be the subject of a single CDP application. Separately and

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contemporaneously, the California Department of Transportation (“Caltrans”) submitted a CDP application to construct a separate intersection improvement in the Playa Vista Project area. Commission staff explained that Caltrans’ project was not “functionally related” to the Playa Vista Project under Section 13053.4 because the Caltrans project was “not under the control of” the Playa Vista Project applicant.<sup>1</sup>

- An applicant sought to construct twelve residential units, as well as extend an existing road and construct a rock revetment to support the units. The applicant submitted sixteen CDP applications for the various projects, which spanned across seventeen lots. Commission staff determined that the proposed developments across the multiple lots nonetheless were “one functionally related project” because they were “represented to be under single ownership.”<sup>2</sup>
- Applicants submitted two separate CDP applications—one for a proposed seawall to protect an existing private marina and campground, and another for a dredging project to promote boat berthing areas at the marina. Although these projects were proposed by the same applicants for a single site, Commission staff recognized the independent utility of the developments and, thus, determined the developments were not functionally related. “[T]he seawall and dredging projects are independent of each other in that the two projects are not functionally related and the applicants could proceed with either project if approved.”<sup>3</sup>
- The Wiyot Tribe applied for a CDP to install a 400-foot long revetment along the shoreline to protect the Tuluwat Village from erosion. In its staff report, staff noted that, although not part of the Tribe’s application, the Tribe had been considering restoring and developing part of the Village. However, no restoration and development had been formally proposed. As such, staff explained that “the permit request before the Commission at this time is solely for the development of the subject shoreline protective structure. . . . [E]ven if the project description were to include proposes for developing other site improvements . . . , the proposed [revetment] is not functionally related” to these development activities because the projects would serve different purposes.”<sup>4</sup>

Here, potential modifications to M1W’s outfall diffusers do not satisfy Coastal Act regulation section 13053.4’s requirements for “functionally related development.” First, the diffuser modifications and the Project are independent because they can operate and function separately from one another. Second, the Project’s EIR/EIS contemplates diffuser modification

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<sup>1</sup> See Staff Report for App. No. 5-00-400, A-5-PLV-00-417 (Playa Capital), Agenda Item W23a & 23b (May 24, 2001) p. 5, available at <https://documents.coastal.ca.gov/reports/2001/6/W23a,b-6-2001.pdf>.

<sup>2</sup> See Staff Report for App. No. 5-90-839 (Lechuza Villas West), Agenda Item Tu9a (Jan. 28, 1997), p. 25, available at: <https://documents.coastal.ca.gov/reports/1997/2/T9a-2-1997.pdf>

<sup>3</sup> See Staff Report for App. No. 1-93-36-A, Agenda Item W16c (Jan. 27, 1997), p. 2, available at: <https://documents.coastal.ca.gov/reports/1997/2/W16c-2-1997.pdf>.

<sup>4</sup> See Staff Report for App. No. 1-03-024, Agenda Item W14a (May 27, 2004), pp. 17-18, available at: <https://documents.coastal.ca.gov/reports/2004/6/W14a-6-2004.pdf>.

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as one of several options for Cal-Am to meet Ocean Plan water quality objectives. Thus, the Project could be functional without these modifications. Third, and most significantly, Cal-Am does not own the outfall and cannot control the application process for a CDP for the outfall diffuser work. Absent a property interest in the outfall, Cal-Am cannot add the outfall diffusers to its CDP application. (See Pub. Resources Code, § 30601.5 [applicant must demonstrate proof of property interest]; see also 14 Cal. Code Regs., § 13053.5, subd. (b) [same].)

As we have previously explained, the Commission can condition Cal-Am's CDP on M1W obtaining a CDP for any modifications to the outfall or Cal-Am performing other measures specified in Mitigation Measure 4.3-5 to ensure that the Project complies with the Ocean Plan's water quality objectives. (See Public Resources Code § 30607 [CDPs "shall be subject to reasonable terms and conditions in order to ensure that [development] will be in accordance with the provisions of [the Coastal Act].") In prior submissions to the Commission, Cal-Am proposed the following Special Condition, which will ensure that any Project discharges comply with water quality objectives.

1. **Outfall Modifications.** PRIOR TO THE COMMENCEMENT OF PROJECT OPERATION, Permittee shall demonstrate that discharges from the outfall would comply with the Ocean Plan and applicable water quality requirements by demonstrating that (1) a Coastal Development Permit or Amendment has been obtained and implemented for any necessary work on the Monterey One Water outfall; and/or (2) Permittee has implemented other measures consistent with Final EIR/EIS Mitigation Measure 4.3-5, as necessary, outside of the Commission's jurisdiction.

(See 9.11.2020 Letter to Commission, Att. A, p. 6.)

Nonetheless, Cal-Am has worked collaboratively with M1W to evaluate how best to comply with Mitigation Measure 4.3-5, including the appropriate design for potential diffuser modifications. Attached as **Exhibit K** are 95% design drawings for the potential diffuser modifications, which have been reviewed by and discussed with M1W staff. Our understanding is that M1W is not requesting any further revisions to the design of the modifications. As part of these modifications, M1W would replace the existing 129 outfall diffusers with those depicted on Sheet C-27 of the design drawings.

If M1W decides to modify the diffusers as currently proposed, potential environmental impacts would be within the scope of what was analyzed in the Final EIR/EIS, which the California Public Utilities Commission found would be less than significant with mitigation. (Final EIR/EIS, pp. 4.3-107, 4.3-109 to 4.3-110.) More specifically, Appendix D3 of the Project's EIR/EIS showed that the Project could potentially exceed certain Ocean Plan objectives under specific discharge scenarios, based on the data and assumptions, modeling and analytical methodology used. However, these specific discharge scenarios can be avoided by controlling the brine discharge flow rate, and the Project's desalination plant component in unincorporated County of Monterey has been designed with the ability to regulate its brine discharge flow rate through the Brine Mixing Box component of the Project that is described further below. (See, e.g., Final EIR/EIS, pp. 3-11, 3-24, 3-30.) Specifically, the desalination plant's brine equalization basin pump station includes three pumps, each with a variable frequency drive. Each pump has

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the ability to discharge 6 to 8.2 million gallons per day (MGD) for a maximum of 16.4 MGD when two pumps are online. Based on the modeling conducted thus far, the minimum brine discharge flow necessary to avoid Ocean Plan water quality objective exceedances is estimated to be between 13 to 18 MGD. Although additional modeling will be necessary to determine the *exact* minimum flow that guarantees non-exceedance of the Ocean Plan objectives, the desalination plant design already has the ability to hold the brine in its brine pond and only discharge at or above this minimum discharge flowrate once it is established.

A design has been developed for the proposed Brine Mixing Box, which would be located on a currently undeveloped portion of M1W's Regional Treatment Plant. (See Final EIR/EIS, p. 3-30.) The Brine Mixing Box would effectively mix the reverse osmosis ("RO") generated brine from the desalination plant, the RO concentrate from M1W's Advanced Water Purification Facility ("AWPF"), and secondary effluent from M1W's RTP before discharge to the ocean through M1W's outfall. This brine mixing structure will ensure no pockets of waste with high concentrations of contaminants.

Further, M1W could modify the angle of the outfall diffusers to ensure that brine discharges satisfy Ocean Plan water quality objectives. As described in the EIR/EIS, angling the diffuser ports would result in increased mixing of wastewater and ocean water in the area known as the zone of initial dilution. A study by Dr. Philip Roberts (Appendix D2 of the EIR/EIS) showed that retrofitting the outfall with diffuser ports at a 60-degree angle will greatly increase dilution of the commingled waste discharge, further reducing the potential for exceeding the Ocean Plan's water quality objectives.

With these modifications to the outfall and the proposed brine discharge pumping scheme, M1W will have the ability to provide the Regional Board with a discharge approach to accommodate the addition of the desalination brine into the commingled waste discharge, and amend its NPDES permit using an approach similar to the one taken to accommodate discharge of AWPF RO concentrate with secondary effluent from the RTP (See NPDES No. CA0048551, [https://www.waterboards.ca.gov/centralcoast/board\\_decisions/adopted\\_orders/2018/final\\_order\\_m1w.pdf](https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2018/final_order_m1w.pdf)).

Overall, the Final EIR/EIS for the Project fully analyzed the secondary impacts of potential modifications to the outfall diffusers, including those depicted in Exhibit K, concluding that secondary impacts would be less than significant. (*Id.*, pp. 4.3-109 to 4.3-113 ["[t]he impacts associated with the physical construction of such a retrofit would likely be minor and temporary."].) Construction impacts would consist primarily of minor sea-bed disturbance and temporary water quality degradation. Even so, "[w]ater quality would rapidly return to ambient conditions following completion of the retrofit." (*Ibid.*) Likewise, any disturbance to benthic communities would be short in duration and of low intensity, such that the communities are anticipated to return to baseline conditions. (*Ibid.*) The outfall modifications depicted in Attachment K are feasible and within the scope of the EIR/EIS' environmental impact analysis. Nevertheless, the Commission may separately condition that outfall diffuser work when M1W applies for a CDP if the Commission finds that additional conditions are required to ensure consistency with the Coastal Act.

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In sum, Cal-Am is not proposing to modify the outfall diffusers as part of this CDP application and does not have a property right to do so. Rather, MIW, as the outfall owner and operator, is the appropriate applicant for such work. Therefore, the outfall diffusers are not functionally related to the Project components subject to this CDP application. Nevertheless, Cal-Am has proposed a Special Condition and the Final EIR/EIS has identified mitigation measures to ensure that any Project discharges would comply with Ocean Plan water quality objectives and impacts associated with the modified diffusers would be less than significant.

**II. ITEM 7 – OUTFALL LINER**

*. . . The liner is also functionally related to the development Cal-Am is proposing as part of its CDP application. Without more information about the design and foreseeable impacts of the liner work, it is difficult for the Commission to analyze the effects of the whole of Cal-Am’s project. . . .*

*Among other things, please provide documentation of any agreement between Cal-Am and MIW that describes what would be included in a CDP application from MIW, including an agreed-upon design for the proposed liner, along with a description of activities needed to install the liner. This description should also identify which jurisdictions would be involved in reviewing the CDP application . . . . Please also identify this MIW CDP application, and any other required permits, as part of an update to the applications, Appendix B, which describes the various permits needed. If MIW has not yet agreed to design or committed to applying for the CDP, please provide this information as part of Cal-Am’s application.*

**Applicant Response:**

As with the potential outfall diffuser modifications, the outfall lining is not a functionally related Project component to be performed by Cal-Am. Because MIW owns and operates the outfall, any outfall lining work would be addressed through a separate CDP application submitted by MIW.

Further, Cal-Am maintains that the proposed method of lining the outfall by spraying the liner in place from within the outfall is not “development” as contemplated by the Coastal Act or the County of Monterey’s and City of Marina’s Local Coastal Programs (“LCP”). The Coastal Act defines “development” as including

[T]he placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land . . . ; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the

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size of any structure . . . ; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations . . .

(Pub. Resources Code, § 30106.)

Here, Cal-Am would not build or expand any existing structure related to the outfall pipeline, but simply would apply a coating to the outfall pipeline’s interior to protect against future corrosion. Although Cal-Am is still working with M1W to refine the spray lining proposal as explained below, any groundbreaking activities would occur outside of the City of Marina in unincorporated Monterey County near Highway 1. Further, the work would not involve the discharge or disposal of waste through the outfall. Indeed, spray lining is much less disruptive than installing a physical liner throughout the pipe, which would require a series of excavations along the pipeline route approximately every 500 feet. For the spray lining work, the contractor need only excavate one entry point within M1W’s existing 20-foot wide sewer utility easement outside of Marina; all other work would be performed belowground and inside the existing pipeline from the entry point to the beach junction box. The proposed work within the outfall pipeline would be no different from painting the interior of a house, which too would be exempt from CDP requirements.

Even if this work constituted “development” under the Coastal Act, the work is exempt from CDP requirements as a repair or maintenance activity. Coastal Act Section 30610 exempts “[r]epair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities,” so long as there is no risk of substantial adverse environmental impact. (See Pub. Resources Code, § 30610, subd. (d).) The Coastal Act also exempts work for “any necessary utility connection.” (Pub. Resources Code, § 30610, subd. (f).) Similarly, both Marina’s Coastal Zoning Ordinance and the County Code exempt “[r]epair or maintenance activities,” including for “any necessary utility connection.” (See Marina LCP Implementation Plan, pp. 27-28; Marina Municipal Code, § 17.43.070(D), (F); Monterey County Code, § 20.70.120(E), (G).) Together, these exemptions allow utilities to perform work and make repairs on existing, permitted infrastructure without the need to obtain a separate CDP for the maintenance. (See Coastal Commission, Repair, Maintenance and Utility Hook-Up Exclusions from Permit Requirements, adopted Sept. 5, 1978.)<sup>5</sup> “No permit is required for repair or maintenance of existing facilities that do not alter the service capacity.” (*Ibid.*)

Nonetheless, Cal-Am is continuing to work with its technical experts and M1W to evaluate how best to implement the outfall lining work and whether potential alternatives, such as the spray liner, would be feasible and would minimize potential environmental impacts within the Coastal Zone to the maximum extent feasible. Cal-Am will update Commission staff regarding its ongoing discussions with M1W on this issue as those discussions continue.

However, because the outfall pipeline belongs to M1W, Cal-Am proposes the following special condition to cover the proposed outfall pipeline maintenance work.

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<sup>5</sup> This guidance is available online at: <https://documents.coastal.ca.gov/assets/legal/exclusions-1987.pdf>.



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2. **Outfall Lining.** PRIOR TO THE COMMENCEMENT OF PROJECT OPERATION, Permittee shall demonstrate that it has obtained all approvals authorizing Project-related repair and maintenance work on the Monterey One Water outfall, including, but not limited to, excavation permits from the County of Monterey, if necessary, and has performed such repair and maintenance work pursuant to the approvals.

In sum, the outfall pipeline lining work is not part of this CDP application because it is not functionally related to the Project components subject to this CDP application. M1W, as the appropriate applicant for such work, will submit a CDP application separately. However, Cal-Am has proposed a Special Condition to ensure that the pipeline maintenance work is implemented prior to the commencement of Project operations.

**III. ITEM 8 – FUTURE PROPOSED WELL LOCATIONS**

*. . . Unless Cal-Am is now proposing just a 24-year operating life for its project, we will need the requested information [regarding available locations for the slant wells] to help us evaluate the reasonably foreseeable coastal resource information to help us evaluate the reasonably foreseeable coastal resource impacts that could occur due to future well locations. . . . If moved laterally, please identify what distance a new well would need to be from a currently proposed well. If moved inland, please identify potential locations. In both instances, please identify the likely impacts to coastal resources and whether Cal-Am would need to obtain additional legal interest in these new locations. . . . Accordingly, please describe Cal-Am's plans for obtaining, or at least foreseeable options for obtaining, source water after the wells' projected 25-year operating life.*

**Applicant Response:**

Cal-Am's permit request for the Project's intake well component is for a 25-year term. The Desalination Plant component of the Project, which is located outside of the Coastal Zone, has a 40- to 60-year operating life. The separate and independent operating life of the Project's proposed intake wells has been conservatively estimated at 25 years. Moreover, Cal-Am agrees with the Coastal Commission staff's prior determination that the slant well network will be safe from coastal hazards within its 25-year operating life. (See 8.25.2020 Staff Report, pp. 55, 60.)

Ultimately it remains speculative to evaluate whether Cal-Am will need to relocate the Project's intake wells laterally or further inland beyond the 25-year term. Within the wells' 25-year operating life, technical advancements may be made that would allow the development of alternative wells in other locations that are not feasible today. The wells also potentially could be replaced in their original locations without the need for any change in siting depending on coastal hazard conditions that exist at that time. Additionally, during the operating life, proper maintenance and cleaning of the well screens and mechanical systems may extend the operational life of the wells beyond 25 years.

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While some of the wells could be affected by coastal hazards in the future in a manner that would prevent Cal-Am from replacing the wells in their same location, this will not impact the Project's ability to supply water to the Monterey Peninsula and will not necessarily require well relocation. Only two wells are at any risk of being covered by sand burial within 20 to 25 years. (See Latham & Watkins' June 30, 2020 Letter to Commission, Exhibit 9.) None of the wells are expected to be affected by other coastal hazards, such as sea level rise, until long after their conservatively projected 25-year operational lives. (E.g., AECOM Coastal Erosion Hazard Analysis, attached as Exhibit A to Cal-Am's October 2, 2019, Response to Commission Staff's August 22, 2019, Notice of Incomplete Application, pp. 5-6; Latham & Watkins' August 13, 2020 Letter to Commission, Exhibit 4, p. 1.) Although the risk of sand burial is expected to be mitigated by soft measures (e.g., removal of invasive non-native plants, revegetation of native plants, and sand removal), under worst case scenarios the sites of those two wells could become unusable, making replacement in location infeasible. Even so, the Project will be constructed with seven wells for reliability purposes, but will only need five wells to be operating in order to maintain the Project's permitted water deliveries. (CPUC Decision 18-09-017, p. 178 (Sept. 13, 2018).) Thus, in the event that those two wells are affected by coastal hazards during the next 25 years, the Project could decommission those wells and continue operations with wells in the remaining five locations.

To ensure that the Project remains consistent with the LCP's coastal hazards provisions, Cal-Am is proposing a special condition requiring Cal-Am to submit an application to the Commission to amend the CDP no later than the start of the 24th year from commencement of slant well operations, unless required earlier due to unanticipated risks from coastal hazards. Specifically, Cal-Am proposes the following special condition:

1. **Slant Well Permit Duration and Amendment.** Upon the commencement of operation of the slant wells, the Permittee shall submit to the Executive Director a NOTICE OF COMMENCEMENT OF OPERATION indicating the commencement date. The Permit's remaining initial term shall be 25 years from the commencement date. In conjunction with Permittee's obligation to submit to the Executive Director an annual monitoring report during the initial term as specified in Special Condition [ ], the Permittee shall inform the Executive Director of the projected need to relocate or replace the slant wells due to risks from coastal hazards. Unless required earlier due to unanticipated risks from coastal hazards, the Permittee shall submit an application to the Commission to amend this Permit no later than the start of the 24th year of the initial term to address coastal hazard risks, including but not limited to the list below:
  - a. To extend the Permit's term for one or more slant wells based on available coastal hazard and sea level rise conditions;
  - b. To relocate one or more slant wells to an alternate location within the coastal zone on which the Permittee has secured a property right to develop such wells; and/or
  - c. To abandon one or more slant wells, which shall include cutting off, capping and burying any abandoned slant well head at least 40 feet below the ground surface and the removal of any above-grade facilities associated with such well.

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**IV. ITEM 9 – WATER DISTRIBUTION PIPELINE**

*It appears that each [alternative] requires additional review, approval, or permitting by various entities – e.g., concurrence by MCWD for use of the pipeline described in Alternative 1, approval by MIW of Alternative 2, and approval by the California Public Utilities Commission (“CPUC”) for Alternative 3, so please keep us informed of the status and timing of those additional reviews and approvals.*

**Applicant Response:**

Commission staff has stated that Cal-Am has not yet obtained MCWD’s concurrence to the use the Shared Pipeline for the Project. However, Cal-Am does not need MCWD’s approval to use the Shared Pipeline to transfer potable water from the Project. (See Wat. Code, § 1810; *Central San Joaquin Water Conservation Dist. v. Stockton East Water Dist.* (2016) 7 Cal.App.5th 1041, 1047.) As described in Cal-Am’s March 5, 2021, response to the Commission’s Notice of Incomplete (“NOI”) Application, the Wheeling Agreement between MCWD and Cal-Am provides that Cal-Am may use the unused capacity in the Shared Pipeline to convey potable water meeting all water quality requirements for human domestic use and consumption for a monthly wheeling charge. (See Wheeling Agreement, attached to Cal-Am’s March 5, 2021 NOI Response as Ex. H, § 5.) Because the Project water would be potable and would meet applicable water quality standards, and because Cal-Am is paying the monthly wheeling charge, Cal-Am may use the pipeline for the Project without obtaining MCWD approval.

Further, on April 26, 2021, the Monterey One Water Board of Directors voted to certify the Pure Water Monterey Expansion (“PWM Expansion”) Supplemental Environmental Impact Report and approve the PWM Expansion (SCH# 2013051094). As described in Cal-Am’s March 5 NOI response, the PWM Expansion includes a pipeline along and within General Jim Moore Boulevard for Cal-Am’s Aquifer Storage and Recovery (“ASR”) project, which is necessary to maximize available water for Cal-Am’s customers even if the desalination Project is never built. Cal-Am could potentially use this pipeline to distribute water produced by the Project.

**V. ITEM 11 – VERNAL PONDS**

In its December 3, 2020, NOI, staff stated:

*Cal-Am’s current application includes updated information about some aspects of those potential effects (including Attachment V. Exhibit B – Pond Drawdown, and Exhibit C – Armstrong Ranch Ponds Groundwater (Geoscience)), though Cal-Am describes these as preliminary findings and states that it will provide full reports after conducting additional data collection. Please provide the above-described full reports. . . .*

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**Applicant Response:**

In August 2020, Geoscience prepared a report (the “August 2020 Report”) regarding the relationship between proposed Project pumping and potential coastal wetlands/vernal ponds identified by the City of Marina’s consultant, Formation Environmental. Of the ponds Formation identified, the Armstrong Ranch ponds are closest to the proposed Project wellfield and overlie the Dune Sand Aquifer within the Project drawdown contours. The August 2020 Report explained that, based on aerial photographs and groundwater elevation projections, the Armstrong Ranch ponds do not depend on groundwater, but rather depend on seasonal rainfall that collects at the bottom of the ponds. (See Cal-Am CDP Application, Ex. B.)

In October 2020, Geoscience installed monitoring equipment in the Armstrong Ranch ponds to collect site-specific lithologic and groundwater data regarding groundwater levels and groundwater quality.

In November 2020, Geoscience prepared a report based on its initial findings after one month of data collection (the “November 2020 Report”). The initial findings showed that groundwater in the Dune Sand Aquifer beneath the Armstrong Ranch ponds is confined and disconnected from any surface water within and immediately beneath the ponds. The data also revealed that the Armstrong Ranch ponds do not depend on groundwater in the Dune Sand Aquifer. (See Cal-Am CDP Application, Ex. C, p. 1.)

Enclosed with this NOI Response as **Exhibit L** is Geoscience’s report following seven months of data collection and monitoring, including two substantial rainfall events in 2021 (the “May 2021 Report”). The data collected fully support Geoscience’s prior conclusions that pumping from the Dune Sand Aquifer will not impact the Armstrong Ranch ponds because the Dune Sand Aquifer is not hydraulically connected to the surface water that feeds the ponds. (See Ex. L, p. 3.)

During its field investigation, Geoscience encountered three distinct groundwater systems: (1) a deep system “equivalent to the Dune Sand Aquifer, showing similar water level trends, quality, and responses to local pumping”; (2) a middle system with “significantly higher salinity than the lower Dune Sand Aquifer system” that is “unconfined and connected to the surface” of the Armstrong Ranch ponds; and (3) a shallow seasonal system “only present after rainfall” that “when saturated, exhibits high salinity.” (Ex. L, pp. 1-2.) Geoscience concluded that the Dune Sand Aquifer and middle unit are “clearly disconnected” based on significant differences in groundwater levels and salinity. (Ex. L, p. 50 [“Water levels in the [deepest system] mimic water levels in MW-4S . . . , even to showing the influence of CEMEX well pumping. Water levels in the [middle unit] do not show cyclic patterns from CEMEX pumping since this zone is unconfined and directly connected to surface water.”]; *id.*, p. 51 [“the conductivity of groundwater in the unconfined . . . unit is about five times greater than the conductivity in the . . . Dune Sand Aquifer”].)

Further, Geoscience’s investigation confirmed that vegetation in the Armstrong Ranch ponds does not depend on groundwater from the Dune Sand Aquifer. Instead, the ponds depend on the percolation of seasonal surface water from rainfall. (Ex. L, p. 2.) The primary vegetation found at the Armstrong Ranch ponds have root system depths of 15 to 28 inches, “several feet

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above the local confining layer” that separates the middle unit from the Dune Sand Aquifer. (Ex. L, pp. 2, 51.) In fact, “[n]o evidence of plant material was detected in the groundwater-bearing sand units.” (Ex. L, p. 48.) “Therefore, wetland vegetation in the Armstrong Ranch ponds do not have any connection to groundwater within the Dune Sand Aquifer. The source of water for pond vegetation is rainfall and seasonal standing water that form in the ponds and percolates from the surface.” (Ex. L, p. 49.)

In sum, the May 2021 Report confirms the conclusions from Geoscience’s August and November 2020 Reports that Project pumping will not impact the Armstrong Ranch ponds. The Dune Sand Aquifer is not hydraulically connected to the surface water that feeds the ponds or to the shallow seasonal perched groundwater unit that develops above the Dune Sand Aquifer from surface percolation.

*We also request that Cal-Am address the following . . . :*

- *Consistency: The two submitted reports are inconsistent in at least one aspect – Exhibit B describes the Dune Sands Aquifer as “unconfined to semi-confined” and Exhibit C describes the same aquifer as “confined under pressure.” We request that the final version of the two reports be reviewed for consistency in a manner that supports the conclusions of each.*

**Applicant Response:**

Commission staff requested that Cal-Am address a purported inconsistency in Geoscience’s previous reports regarding whether the Dune Sand Aquifer is confined. The reports are not inconsistent, but rather have been refined following Geoscience’s physical investigation of site-specific conditions and confirm that the Dune Sand Aquifer is a confined groundwater unit. There is a separate perched groundwater unit above the Dune Sand Aquifer, but the two are not hydraulically connected. (Ex. L, p. 3.)

The August 2020 Report was a “desktop analysis” that was based on “indirect information, such as aerial photographs and groundwater elevations projected from outside the Armstrong Ranch pond area.” (Cal-Am CDP App., Ex. C, p. 7.) At the time, “access for physical investigation of groundwater conditions at the Armstrong Ranch ponds was not available.” (*Ibid.*) Based on the resources available, the August 2020 Report describes the Dune Sand Aquifer as “unconfined to semi-confined.” (Cal-Am CDP Application, Ex. B, p. 19.) Following the August 2020 Report, Geoscience was able to obtain access to the Armstrong Ranch ponds to conduct a physical investigation of groundwater levels and quality.

In its November 2020 Report, Geoscience explained that “the local site conditions . . . indicate that [the Dune Sand Aquifer] exhibits localized confinement based on the conditions that have developed in the inner dune depressions in which the Armstrong Ranch ponds have formed, which is not unusual for vernal ponds.” (Ex. L, p. 2; see also Cal-Am CDP Application, Ex. C, pp. 1, 20.) Further, Geoscience’s investigation revealed a second groundwater surface, which is unconfined, beneath the ponds. (Cal-Am CDP Application, Ex. C, p. 1, 20.) This unconfined unit, however, had salinity levels “substantially in excess of observed salinity in the

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Dune Sand Aquifer,” suggesting that the water comes from percolating subsurface water and is not hydraulically connected to the Dune Sand Aquifer. (*Id.*, pp. 2, 20.) Geoscience also encountered the unconfined water at a depth deeper than the maximum rooting depth of vegetation in the Armstrong Ranch Ponds, demonstrating that the ponds are not dependent on either that shallow unconfined groundwater unit or the deeper Dune Sand Aquifer. (*Id.*, p. 2.)

Geoscience’s May 2021 Report and the seven-months of data collected reinforce the November 2020 Report’s conclusions. Static groundwater levels in the unconfined unit “represent a perched system . . . lower in elevation than the static groundwater levels in the . . . locally confined unit” of the Dune Sand Aquifer.” (See Ex. L, p. 2.) Moreover, given the difference in water level elevations and salinity levels, the “two systems are clearly disconnected.” (*Ibid.*)

- *Mitigation options: The reports describe Cal-Am conducting very limited data collection to support the reports’ conclusions. . . . Because of the difficulty of mitigating adverse impacts to these types of habitats, please include in the final reports additional detailed information about what mitigation locations and methods Cal-Am would propose should there be adverse impacts to these areas.*

**Applicant Response:**

Geoscience’s monitoring and data collection efforts confirm that the Armstrong Ranch ponds do not depend on groundwater from the Dune Sand Aquifer. Rather, the ponds depend on percolation of seasonal surface water from rainfall into a seasonally recharged shallow perched groundwater unit. (See Ex. L, p. 2 [describing conclusions after seven months of data collection; see also Cal-Am CDP Application, Ex. C, pp. 1-2 [describing conclusions after one month of data collection].) Geoscience observed a distinct difference in groundwater elevation and quality that shows that the Dune Sand Aquifer and the shallow perched unit do not mix and are hydraulically separated. (Ex. L, pp. 2-3; Cal-Am CDP Application, Ex. C, pp. 1-2.) Therefore, Project pumping will not impact the Armstrong Ranch ponds. (Ex. L, p. 3; Cal-Am CDP Application, Ex. C, p. 2.)

Because the Project will not impact the Armstrong Ranch ponds, mitigation is not required. Nevertheless, Cal-Am is proposing to continue monitoring groundwater conditions at the Armstrong Ranch ponds as part of the Adaptive Management Program it previously proposed in its September 11, 2020, Letter to the Commission. Accordingly, consistent with Cal-Am’s September 11 Letter, Cal-Am proposes the following Special Condition to be included with the CDP:

3. **Vernal Pond Adaptive Management Program:** PRIOR TO PERMIT ISSUANCE, the Permittee shall submit to the Executive Director for review and approval a Vernal Pond Adaptive Management Program that includes the following:
  - a. Stage 1: Supplemental data collection and near-term monitoring to determine whether there is a connection between vernal ponds within the drawdown zone of the Project and the Dune Sand Aquifer. The results of

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Stage 1 shall be submitted to the Executive Director for review and approval;

- b. Stage 2: If the results of Stage 1 determine that there is a connection between the vernal ponds within the drawdown zone of the Project and the Dune Sand Aquifer, the program would evaluate the degree to which the Project's pumping would affect the ponds. The results of Stage 2 shall be submitted to the Executive Director for review and approval; and
- c. Stage 3: Based on the results of Stage 1 and Stage 2, Stage 3 would develop a Wetland Resiliency, Enhancement, Restoration, and Monitoring Plan (Plan). If Stage 3 is necessary, the Permittee shall apply for and obtain the Commission's approval of the Plan in the form of an amendment to this permit. The Plan would require compensation for potential impacts and would include the following:
  - i. The Plan would provide no less than 1:1 mitigation if impacts can be mitigated on-site. If off-site mitigation is necessary the Plan would provide for 1:1 mitigation for wetland creation; 3:1 mitigation for wetland restoration; and 4:1 mitigation for wetland enhancement.
  - ii. The specific creation, restoration, or enhancement measures that will be used at each site, including grading and planting plans, the timing of the mitigation measures, monitoring that will be implemented to establish baseline conditions and to determine whether the sites are meeting the applicable site specific success criteria. The Plan shall also identify contingency measures that will be implemented should any of the sites not meet the site specific success criteria. The success criteria developed for specific sites will ensure that the mitigation ratios in Section (c)(i) are achieved.
  - iii. "As-built" plans for each site and annual monitoring reports for no less than five years or until the sites meet performance criteria.
  - iv. Legal mechanism(s) proposed to ensure permanent protection of each site – e.g., conservation easements, deed restriction, or other methods.

(See 9.11.2020 Letter to Commission, Att. A, pp. 7-8.)

Cal-Am would implement the Adaptive Management program in close coordination with Commission staff to ensure that there would be no adverse effects to vernal ponds associated with Project pumping.

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**Index of Exhibits Attached to Cal-Am’s May 19, 2021, Response  
to Notice of Incomplete Application<sup>6</sup>**

Exhibit K	Brown & Caldwell, Preliminary Design Drawings for Outfall Protection Project
Exhibit L	Geoscience Support Services, Evaluation of Hydrogeologic Conditions – Armstrong Ranch Ponds within the Caltrans Right-of-Way, Near the City of Marina, California (May 12, 2021)

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<sup>6</sup> The Exhibits run consecutively from the set of Exhibits that Cal-Am submitted as part of its March 5, 2021, NOI response.