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November 18, 2019

Heal the Bay

Ms. Renee Purdy, Executive Officer Regional Water Quality Control Board Los Angeles Region 320 W 4<sup>th</sup> Street, Suite 200 Los Angeles, CA 90013

Sent via email to: losangeles@waterboards.ca.gov

RE: WASTE DISCHARGE REQUIREMENTS FOR THE SOUTHERN CALIFORNIA EDISON COMPANY PEBBLY BEACH DESALINATION PLANT (ORDER R4-2019-XXXX, NPDES NO. CA0061191).

To Ms. Purdy:

On behalf of Heal the Bay, a non-profit environmental organization with over 30 years of experience dedicated to making the coastal waters and watersheds of greater Los Angeles safe, healthy, and clean, we respectfully submit the following comments concerning the Waste Discharge Requirements for the Southern California Edison Company Pebbly Beach Desalination Plant ("Tentative Order").

Ocean water desalination is the most expensive and energy intensive form of water supply, which provides only one single benefit to the community it serves. In addition, the intake and discharge for an ocean water desalination plant negatively impact marine life. Pursuing or expanding ocean water desalination efforts diverts resources away from other local water supply options, such as wastewater recycling and stormwater capture, which provide multiple additional benefits including water quality improvements. For these reasons, we believe that ocean water desalination must be used only as a last resort for local water supply, when all other local water supply options have been used to the maximum extent practicable. In Los Angeles County, many local water supply options remain underutilized including wastewater recycling, stormwater capture, groundwater remediation, and conservation.

The Pebbly Beach Desalination Plant ("Facility"), operated by Southern California Edison ("Permittee"), is located on Catalina Island, which shares a similar Mediterranean climate with Los Angeles County on the mainland. However, Catalina Island is a relatively small, isolated island with steep terrain and a shallow and limited groundwater reservoir, which constrains the potential for local water. To avoid the detrimental and irreversible effects of over-pumping the limited groundwater reservoir, upon which many local and endemic species depend, all other local water supply options must be explored. We recommend that the City of Avalon continue their extensive and robust water conservation efforts, and continue to investigate the feasibility of stormwater capture as well as recycling treated wastewater from the Avalon Wastewater Treatment Facility. If, in pursuit of more sustainable local water, operation of the desalination plant is necessary to support the community and to prevent over-pumping of the groundwater, the regulation over the operation of the Facility must be sufficient to protect public and environmental health.

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## We would like to thank the Regional Board for including conditions designed to protect both public health and marine resources in the Order, and we would like to make ourselves available for continued collaboration on this permit. We are looking forward to working with the Permittee and the Regional

collaboration on this permit. We are looking forward to working with the Permittee and the Regional Board on language for this permit, and we thank staff for inviting us to collaborate. In order to ensure that regulation over the operation of the Facility is sufficient to protect public and environmental health, we offer the following recommendation to improve the Tentative Order:

- For any one calendar month or week during which no sample (daily discharge) is taken and no reasonable justification is provided, a violation must be accordingly determined for that calendar month or week, with appropriate enforcement action.
- The Permittee shall retain records of all monitoring information, including all calibration and maintenance records, and records of all data used to complete the application for this Order, for a period of at least 5 years.
- The installation of two additional subsurface seawater intake wells is preferable to open ocean intake wells; however, it does not lessen the potential for intake or mortality of marine life unless the open ocean intake pipes are decommissioned.
- The Permittee must be liable for any and all effluent limit exceedances, even during the event of an Upset or Anticipated Bypass.
- Reporting for anticipated non-compliance or modifications cannot lead to unenforced violation of water quality standards.

These recommendation are discussed in further detail below.

For any one calendar month or week during which no sample (daily discharge) is taken and no reasonable justification is provided, a violation must be accordingly determined for that calendar month or week, with appropriate enforcement action.

As currently written in the Tentative Order, "[f] or any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL." However, it is important that samples are taken on schedule as required by the permit, unless there are safety concerns, or sampling was otherwise not possible. We understand that skipping a sampling event without reasonable justification is usually determined as a monitoring violation rather than a water quality violation, and request that clarifying language be added to the permit. We recommend the following language be added to the first paragraph under Section VII.E. of the Tentative Order:

"For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month with respect to the AMEL. If no reasonable justification (i.e. unsafe sampling conditions, no discharge, etc.) is provided in the absence of a sampling event for a calendar month, a monitoring violation will be determined for that calendar month."

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Pursuant to the same principles, we recommend the following language be added to the first paragraph under Section VII.F of the Tentative Order:

"For any one calendar week during which no sample (daily discharge) is collected, no compliance determination can be made for that calendar month with respect to the AWEL. If no reasonable justification (i.e. unsafe sampling conditions, no discharge, etc.) is provided in the absence of a sampling event for a calendar month, a monitoring violation will be determined for that calendar month."

If a sampling event is missed without reasonable justification, we lose data which is necessary to understand the potential impacts of the facility on local water quality. More importantly, missing that sampling event can allow a potential water quality exceedance to go undetected, and therefore unresolved, prolonging the negative impacts of the water quality exceedance. For this reason, appropriate enforcement action must be taken as soon as possible in the event of a monitoring violation.

The Permittee shall retain records of all monitoring information, including all calibration and maintenance records, and records of all data used to complete the application for this Order, for a period of at least 5 years.

Section IV.A of the Tentative Order currently states that the Permittee "shall retain records of all monitoring information, including all calibration and maintenance records and all original strip charge recordings for the continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least 3 years." Because the operation of the desalination plant has the potential to raise environmental concerns and questions of public health and safety we recommend that the record retention period be increased to a minimum of at least 5 years. In particular, while we appreciate that the Order includes several measures aimed at minimizing the impact that the new intake wells will have on the marine environment, a more precise assessment of the actual effect of the Facility will only be possible through data analysis. Consequently, having consistent data available over a period of at least five years will increase the size of the data sample and ultimately allow for more reliable analyses and results.

Furthermore, maintaining all records for a longer period of time will also benefit the Permittee who will be able to track the functioning of the plant and maintain the Facility in optimal condition. In fact, analyzing monitoring data trends and making comparisons throughout the life-span of the Facility may lead the Permittee to anticipate potential wear and tear and adjust their maintenance schedule in order to avoid unforeseen breakdowns. In the long run, this measure may also decrease the overall costs incurred by the Permittee.

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The installation of two additional subsurface seawater intake wells is preferable to open ocean intake wells; however, it does not lessen the potential for intake or mortality of marine life unless the open ocean intake pipes are decommissioned.

The current language in Attachment F Section II.B states that "the installation of two additional subsurface seawater intake wells will likely result in even less potential for the intake or mortality of marine life." We find this language to be inaccurate and misleading.

While subsurface intake wells are certainly preferable to above surface intake wells, the installation of two additional intake wells of any sort will create **more** potential overall for the intake or mortality of marine life. The above mentioned statement contradicts the statement that immediately precedes it in the same paragraph: "recent testing of the two current wells demonstrated that intake or mortality of all forms of marine life at the well is **minimal."** Thus, while the intake or mortality is minimal, it is nonetheless existent. Consequently, it would constitute a logical fallacy to state that the installation of two additional wells would result in "even less" potential for the intake or mortality of marine life. We recommend that the following statement be stricken from Attachment F Section II.B in order to avoid misleading readers:

"Recent testing of the two current wells demonstrated that intake or mortality of all forms of marine life at the wells is minimal. The installation of two additional subsurface seawater intake wells will likely result in even less potential for the intake or mortality of marine life."

Additionally, considering the larger impact that open ocean intake has on marine life when compared to subsurface intake, we recommend that the Permittee pursue using subsurface intake only. The existing open ocean intake pipes should be either decommissioned, or used only when necessary while using the subsurface intake pipes as the primary intake to the Facility.

The Permittee must be liable for any and all effluent limit exceedances, even during the event of an Upset or Anticipated Bypass.

Under the Tentative Order, a Bypass is defined as the "intentional diversion of waste streams from any portion of the treatment facility. (40 CFR section 122.41 (m)(1)(i))." Although Bypass is prohibited unless certain stringent conditions are met, the Tentative Order state: "The Regional Board **may** take enforcement action against the Discharger for bypass unless [...] (40 CFR section 122.41 (m)(4)(i))." We recommend that this language be changed to:

"The Regional Board may shall take enforcement action against the Discharger for bypass unless [...]."

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## Reporting for anticipated non-compliance or modifications cannot lead to unenforced violation of water quality standards.

The Tentative Order states "The Permittee shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR section 122.41(I)(2).)" We suggest the following clarifying language to Attachment D, section V.G., to ensure that the Regional Board review the proposed changes/anticipated non-compliance and determine if this is allowable, and to ensure that other parties should be able to review the proposal and provide comments on the potential impact the proposal will have:

"The Permittee shall give advance notice to the submit a plan for Regional Water Board approval of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 CFR section 122.41(I)(2).) Reporting anticipated noncompliance does not preclude enforcement action by the Regional Water Board in the event of effluent limit violations under this permit during the period of anticipated noncompliance."

Thank you for the opportunity to comment on the Waste Discharge Requirements for the Southern California Edison Company Pebbly Beach Desalination Plant. We look forward to continuing our collaborative work with the Regional Board in order to protect public and environmental health throughout the Los Angeles Region. If you have any questions concerning this comment letter, please contact Annelisa Moe via e-mail at <a href="mailto:amoe@healthebay.org">amoe@healthebay.org</a>, or by telephone at (310) 451-1500 X115.

Sincerely,

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Heal the Bay

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