City of Santa Barbara

Public Works Department

www.SantaBarbaraCA.gov

Main Office
630 Garden Street
P.O. Box 1990
Santa Barbara, CA
93102-1990

Administration
Tel: 805.564.5377
Fax: 805.897.2613

Engineering
Tel: 805.564.5363
Fax: 805.564.5467

Facilities
Tel: 805.564.5415
Fax: 805.897.2577

Street Maintenance
Tel: 805.564.5413
Fax: 805.897.1991

Transportation
Tel: 805.564.5385
Fax: 805.564.5467

Water Resources
Tel: 805.564.5387
Fax: 805.897.2613

August 31, 2015

Mr. Peter von Langen
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

SUBJECT: Work Plan Submission

Dear Mr. von Langen:

This is an update to the City of Santa Barbara (City) Subsurface Desalination Intake and Potable Reuse Feasibility Study (Study) draft work plans that were submitted on June 25, 2015, to the Central Coast Regional Water Quality Control Board (RWQCB). Since then, the Technical Advisory Process (TAP) and stakeholder workshop for the draft work plans have been completed, and comments have been incorporated into the final work plans.

Background

On January 30, 2015, the RWQCB amended the City's National Pollutant Discharge Elimination System (NPDES) Permit (Amended Order No. R3-2010-0011, NPDES No. CA0048143). In the amended permit, the RWQCB incorporated an action taken by the City Council of the City of Santa Barbara directing staff to begin "to explore a range of alternatives, including subsurface intake and potable reuse options" by adding a permit condition to require the City to "...analyze the feasibility of a range of alternatives, including subsurface intake and potable reuse options" and "...submit a feasibility study Work Plan, acceptable to the Regional Water Board, By August 31, 2015" (Section VI Paragraph C.6.c.iii, Special Provisions, Desalination Facility).

Pursuant to the aforementioned Special Provision in the amended permit, the following two Work Plans are attached for submission:

1. Subsurface Desalination Intake Work Plan

2. Potable Reuse Work Plan

The objective of the work plans is to present the methodology and procedures that will be used to perform the subsurface desalination intake and potable reuse feasibility studies.

Work Plan Revisions

The comments from the TAP panel and stakeholders primarily focused on the project goals and objectives. Specifically, some comments questioned the City's approach of dealing with the subsurface intake and potable reuse studies independently. These comments have been addressed in the updated work plans. The City's response to this concern is summarized as follows:

While the scope of this study is to satisfy the requirements of the RWQCB's permit amendment and the direction given to staff by City Council, the results of this effort may inform a future Long Term Water Supply Plan update. In the future, there could be a risk of increased water supply shortages caused by potential reduction in water supply allocations from Cachuma Reservoir, which currently provides over 50 percent of the City's water supply in normal (non-drought) years. The existing Cachuma water allocation could be reduced by many factors including; pending federal environmental decisions, reduced operational yield due to siltation and reduced drought yield. Given that the impacts of these issues are currently unknown, evaluation of several combinations of desalination and potable reuse capacity options is premature at this time. Instead, the Study will evaluate the technical feasibility of the maximum capacity of potable reuse and subsurface intake options. The maximum yield will provide information on the whether the alternatives could replace the screened open ocean intake independently, and potentially combined.

The current work plan and project scope, as directed by City Council and the RWQCB, is appropriate because it will determine the maximum capacity that is technically feasible from subsurface intakes and potable reuse without requiring the City to invest in developing many project concepts that may or may not address the City's future needs.

If future Cachuma supply is reduced and the City needs to replace existing supply, the City will need to update its Long Term Water Supply Plan. Alternatives considered to replace any loss in supply may include desalination and potable reuse, or a combination of both. The Study currently underway will provide valuable information to inform such future studies. This provides a methodical approach to evaluating information, while meeting objectives set forth by City Council and the RWQCB.

We are pleased to submit to you the final work plans, as well as responses to all TAP and public comments received. Upon your review, please confirm the final Work Plans are acceptable to the Regional Board. We are requesting your confirmation by September 14th, 2015, before proceeding with the next phase of work.

If you have any questions, please contact me at 805-564-5571 or kdyer@santabarbaraca.gov.

Sincerely,

Kelley A. Dyer
Water Resources Supervisor

Attachments:
- Final Subsurface Desalination Intake Work Plan
- Final Potable Reuse Work Plan
- City Responses to Public Comments (Workshop 1)
- City Responses to NWRI TAP comments (Workshop 1)

Cc:
- Rebecca Bjork, City of Santa Barbara
- Joshua Haggmark, City of Santa Barbara
- Tom Seacord, Carollo Engineers, Inc.