NOTICE OF SPECIAL MEETING OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

PROJECT COMMITTEE NO. 15

February 20, 2020 8:30 a.m.

NOTICE IS HEREBY GIVEN that a Special Meeting of the South Orange County Wastewater Authority (SOCWA) Project Committee No. 15 has been called by the Chairman of PC-15 Committee to be held on **February 20, 2020**, at **8:30 a.m.** at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

THE MEETING ROOM IS WHEELCHAIR ACCESSIBLE. IF YOU REQUIRE ANY SPECIAL DISABILITY RELATED ACCOMMODATIONS (I.E., ACCESS TO AN AMPLIFIED SOUND SYSTEM, ETC.) PLEASE CONTACT THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SECRETARY'S OFFICE AT (949) 234-5452 AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SCHEDULED MEETING. THIS AGENDA CAN BE OBTAINED IN ALTERNATE FORMAT UPON WRITTEN REQUEST TO THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S SECRETARY AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO THE SCHEDULED MEETING.

AGENDA EXHIBITS AND OTHER WRITINGS THAT ARE DISCLOSABLE PUBLIC RECORDS DISTRIBUTED TO ALL, OR A MAJORITY OF, THE MEMBERS OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY PROJECT COMMITTEE NO. 15 IN CONNECTION WITH A MATTER SUBJECT TO DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE PROJECT COMMITTEE NO. 15 ARE AVAILABLE FOR PUBLIC INSPECTION AT THE LOCATION OF THE MEETING. IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE PROJECT COMMITTEE NO. 15 LESS THAN TWENTY-FOUR (24) PRIOR TO THE MEETING, THEY WILL BE AVAILABLE AT THE LOCATION OF THE MEETING AT THE SAME TIME AS THEY ARE DISTRIBUTED TO THE PROJECT COMMITTEE NO. 15 MEMBERS, EXCEPT THAT, IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE PROJECT COMMITTEE NO. 15 MEETING AT THE LOCATION OF THE MEETING.

<u>AGENDA</u>

1. Call Meeting to Order

2. Public Comments

Those wishing to address the **project committee no. 15** on any item <u>Listed</u> on the Agenda should submit a "request to be heard" form to the Clerk of the Board before the Presiding Officer announces that agenda item. Your name will be called to speak at that time.

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3. Approval of Minutes

a. Engineering Committee Meeting Minutes of January 16, 2020

Recommendation:

Staff recommends the PC-15 Committee to approve minutes as submitted.

4. Review Feasibility Study by Hazen & Sawyer

Recommended Action:

Staff recommends the PC-15 Committee to approve Feasibility Study to Evaluate Future Alternatives.

<u>Adjournment</u>

I hereby certify that the foregoing Notice was personally emailed or mailed to each member of the SOCWA Project Committee No. 15 at least 24 hours prior to the scheduled time of the Special Meeting referred to above.

I hereby certify that the foregoing Notice was posted at least 24 hours prior to the time of the above-referenced Project Committee No. 15 meeting at the usual agenda posting location of the South Orange County Wastewater Authority and at www.socwa.com.

Dated this 18th day of February 2020.

Betty Burnett, General Manager/Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

MINUTES OF SPECIAL MEETING OF THE



SOUTH ORANGE COUNTY WASTEWATER AUTHORITY

Project Committee No. 15

January 16, 2020

The Special Meeting of the South Orange County Wastewater Authority (SOCWA) Project Committee No. 15 was held on January 16, 2020, at 10:00 a.m. at their Administrative Offices located at 34156 Del Obispo Street, Dana Point, California. The following members of Project Committee No. 15 were present:

MIKE DUNBAR	Emerald Bay Service District
DENNIS ERDMAN	South Coast Water District
MATT COLLINGS	Moulton Niguel Water District
DAVID SHISSLER	City of Laguna Beach

BETTY BURNETT General Manager
JASON MANNING Director of Engineering
JIM BURROR Director of Operations

AMBER BAYLOR Director of Environmental Compliance

RONI YOUNG Associate Engineer DAVID BARANOWSKI Senior Engineer

JEANETTE COTINOLA Procurement/Contracts Administrator

JAMES JONES Chief Plant Operator
DANITA HIRSH Administrative Assistant

Also Present:

Staff present:

DAVE JONES Hazen & Sawyer BRYCE DANKER Hazen & Sawyer

JOE MCDIVITT South Coast Water District
ROD WOODS Moulton Niguel Water District

1. Call Meeting to Order

Chairperson Dunbar called the meeting to order at 10:05 a.m.

2. Public Comments

None

3. Approval of Minutes

ACTION TAKEN

The PC-15 Committee members conceded to approving the Minutes of November 14, 2019.

4. Review of Current Construction of the Facilities Improvements Project

Mr. Manning gave a presentation on the Coastal Treatment Plant improvements. An open discussion ensued.

This was an information item; no action was taken.

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5. <u>Proposed Additional Scope of Work for Hazen & Sawyer to Consider Various Alternatives for the Coastal Treatment Plant</u>

Committee Chair Mike Dunbar gave a brief overview on having Hazen & Sawyer to conduct a feasibility study to address the Coastal Treatment Plant alternatives. An open discussion ensued.

Hazen & Sawyer was requested to provide a feasibility study proposal and present to the Committee at its next PC-15 Committee Meeting.

This was an information item; no action was taken

6. Status of the Sludge Force Main Project

Mr. Manning presented the Sludge Force Main construction schedule to the members. An open discussion ensued.

This was an information item; no action was taken

7. Status of Aeration System Improvements

Mr. Manning updated the Committee Members on the Aeration System Improvements. An open discussion ensued.

This was an information item: no action was taken

8. Adjournment

There being no further business, Chairperson Dunbar adjourned the meeting at 11:01 a.m.

I HEREBY CERTIFY that the foregoing Minutes are a true and accurate copy of the Minutes of the Special Meeting of the South Orange County Wastewater Authority Project Committee No. 15 of January 16, 2020 and approved by the Project Committee No. 15 and received and filed by the Board of Directors of the South Orange County Wastewater Authority.

Betty Burnett, General Manager / Secretary
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY



February 6, 2020

Mr. Jason Manning Director of Engineering South Orange County Wastewater Authority (SOCWA) 34156 Del Obispo Street Dana Point, CA 92629

Re: Coastal Treatment Plant - Feasibility Study to Evaluate Future Alternatives

Dear Jason:

We are very pleased to have the opportunity to submit this letter proposal to conduct a feasibility study to evaluate future alternatives for SOCWA's Coastal Treatment Plant (CTP). This proposal is in response to a request made at the PC-15 Committee meeting on January 16, 2020.

Hazen understands that the primary purpose of the feasibility study is to assist SOCWA in negotiating with the Moulton Niguel Water District (MNWD) regarding funding of future upgrades or other alternatives for the CTP. In addition, we understand that SOCWA wants to be prepared for future regulations especially as it relates to ocean discharge. SOCWA also wants the study to include the main plant (primary and secondary treatment) as well as the Advanced Water Treatment (AWT) plant in order to facilitate the production of recycled water for the region.

Scope of Work

Task 1 – Summary of Existing and Future Conditions

Hazen will describe the current conditions at the CTP including sewer-shed catchment area, effluent destinations and solids destination. Hazen will also summarize the current issues faced by SOCWA at the CTP including aging infrastructure, high wet weather peak flows, and changes in average dry weather flows, i.e., departure of MNWD flows.

This task will also present estimated future flows and loads, recycled water requirements, recycled water demands and future regulations to be considered.

The information used to conduct this task will be taken from previously prepared reports and documents.

Task 2 – Future Alternatives to be Evaluated

Hazen will identify and describe future alternatives to be evaluated as part of this feasibility study. These are:

- Abandon the CTP and convey all flows to the SOCWA Regional Treatment Plant (RTP)
- Maintain the current plant at its rated 6.7 mgd capacity through rehabilitation and replacement (R&R) projects.



• Upgrade the treatment system but de-rate the plant capacity to 4.0 mgd

Task 3 – Evaluate Abandoning the CTP

This task will assume that the existing treatment facilities at the CTP will be abandoned. Instead, all influent flows will be conveyed to the RTP. This task will be limited to an overview to identify any "fatal flaws" or other overriding considerations.

Task 4 – Maintain the Current System at 6.7 mgd Capacity

This task will assume that future projects at the CTP will follow the Ten-Year Capital Improvement Program (2019 - 2028) prepared by SOCWA.

Task 5 – Upgrade Treatment but De-rate the Plant Capacity to 4.0 mgd

The alternatives to be considered in this task include:

- Conventional Activated Sludge
- Membrane BioReactors (MBR)
- Membrane Aerated BioReactors (MABR)
- Densified Activated Sludge

In this task, Hazen will evaluate all liquid stream treatment processes including the AWT. In addition to treatment, Hazen will also evaluate flow equalization alternatives to attenuate peak wet weather flows. This task assumes continued conveyance of sludge to the RTP through the Export Sludge Force Main.

Task 6 – Develop Present Worth Estimates

As part of this task, Hazen will develop estimated capital and operation and maintenance (O&M) costs for the alternatives evaluated in Task 5. We do not anticipate the need to develop cost estimates for Task 3 at this stage. For Task 4, Hazen will rely on the cost estimates presented in the Ten-Year Plan and any subsequent estimates developed for discussions with MNWD. The capital cost estimates will be Class 5 Level as defined by the American Association of Cost Estimating Engineers for estimating construction costs plus agreed-upon mark-up percentages for non-construction related activities such as engineering, administration, legal, etc. By combining estimated capital costs with O&M costs, Hazen will present estimated present worth values for comparisons between alternatives.

Task 7 – Prepare Summary Technical Memorandum (TM)

In addition to the cost estimates, Hazen will also present and discuss other factors and issues to be considered. Hazen will prepare an overall table summarizing estimated costs, present worth and other non-economic factors to be considered in the comparative evaluation. This table will provide the basis for the TM. The TM will summarize the results of all tasks. A draft TM will be submitted to SOCWA for review and comment. Once all review comments have been received, Hazen will finalize and submit the final TM to SOCWA.



Estimated Fees

The attached table presents our estimated level-of-effort and fee to conduct the above tasks. The total not-to-exceed fee for the proposed scope of work is \$100,000.

Estimated Schedule

Hazen estimates that we can complete the above scope of work within 3 months after receiving the Notice to Proceed from SOCWA.

We sincerely appreciate the opportunity to submit this proposal. Our local team led by Dave Jones and Ian Mackenzie are available and ready to move forward with this important project. If you should have any questions or wish to discuss our proposal, please contact me at DRJones@HazenandSawyer.com or (916) 769-8753. Thank you.

Sincerely,

Dave Jones, PE Vice President

Enclosure

South Orange County Wastewater Authority Coastal Treatment Plant Feasibility Study to Evaluate Future Alternatives February 7, 2020

TASK	VP	SA II	А	SPE	PE	Е	SC	Admin	Total	
Hourly Rat	9 = \$270	\$240	\$220	\$180	\$140	\$130	\$140	\$110	Hours	Labor
Feasibility Study										
Project Management	6	12	0	0	8	0	0	8	34	\$ 6,500
Summary of Existing and Future Conditions	1	6	6	10	16	0	0	0	39	\$ 7,070
Future Alternative Evaluation	2	6	4	10	17	0	0	0	39	\$ 7,040
Abandoning the CTP	2	8	4	14	18	0	0	0	46	\$ 8,380
Maintain Current System at 6.7 mgd Capacity	2	12	12	32	40	0	0	0	98	\$ 17,420
Upgraded Treatment at 4.0 mgd	2	14	12	32	40	0	0	0	100	\$ 17,900
Develop Present worth Estimates	1	8	26	10	12	0	0	0	57	\$ 11,390
Prepare Summary Technical Memorandum	4	16	20	36	40	0	0	0	116	\$ 21,400
Feasibility Stu	dy 20	82	84	144	191	0	0	8	529	\$97,100
To	tal 20	82	84	144	191	0	0	8	529	\$ 97,100

Haze	en and Sawyer Labor Classifications
VP -	Vice President

SAII - Senior Associate II / QA/QC

SAI- Senior Associate I / QA/QC

SPE - Senior Principal Engineer / Cost Estimator

PE - Engineer

AE - Assistant Engineer

CAD - CAD Designer

ADMIN - Administrative

Labor Total	\$ 97,100
Other Direct Costs	\$ 2,900
Grand Total (Labor + ODCs)	\$ 100.000