

PMC for 400 MLD SWRO Desalination Plant at Perur, Chennai

Consortium Partners

SMEC International Pty. Ltd. (ACN-065440619/FCRN-F01483)

NJS Engineers India Pvt Ltd, India (CIN - U74210PN2007PTC129798)

Tata Consulting Engineers Limited, India (CIN- U74210MH1999PLC123010)

SMEC (India) Pvt. Ltd. (CIN: U93000DL1997PTC088574)



Ref: SMEC/ CMWSSB / 5061185/167

Date: 23rd September 2020

To,

The Superintending Engineer (Desalination)

6th floor, Chennai Metropolitan Water Supply and Sewerage Board,

No.1, Pumping Station Road,

Chintadripet, Chennai 600 002

Tamil Nadu, India



Sub: Consultancy for "Design, Preparation of Bid Documents & Evaluation of Bids for the Proposed Construction of 400 MLD Capacity Seawater Reverse Osmosis Desalination Plant at Perur along East Coast Road, South of Chennai, Tamil Nadu and Construction Management & Supervision for the Proposed Desalination Plant and its Product Water Conveyance Pipeline from the Plant and upto Porur and all allied works"
Submission of Draft EIA Review report for 400 MLD Desalination Plant (CP1) and its Pumping Station (CP2-1) - R1 (5 copies) – Reg.

Ref: 1. Our Letter no. Ref: SMEC/ CMWSSB / 7061563/005, dated 20.01.2020
2. Your Letter no. Lr.no.CMWSSB/SE(Desal)/400 MLD Plant / PMC/2020, dated 13.01.2020
3. Our Contract Agreement with CMWSSB, dated 09.01.2020
4. Our Letter no. Ref: SMEC/ CMWSSB / 5061185/073, dated 26th May 2020
5. Our Letter no. Ref: SMEC/ CMWSSB / 5061185/135, dated 12th August 2020

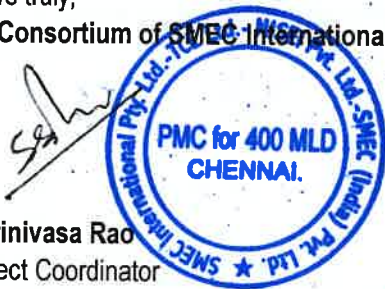
Dear Sir,

With reference to the above subject project, please find enclosed **five (5) copies of Draft Environmental Impact Assessment (EIA) Review report for 400 MLD Desalination Plant (CP1) and its Pumping Station (CP2-1) - R1** for your perusal. The observations furnished by CMWSSB on the subject report vide E-mail dated 3rd August 2020 on Draft EIA report are updated in this submission. The comment response sheet is also attached herewith for ready reference.

Thanking you assuring our services at all times.

Yours truly,

For Consortium of SMEC International Pty Ltd-TCE Ltd.- NJS Engineers India Pvt. Ltd.-SMEC (India) Pvt. Ltd.



S.Srinivasa Rao
Project Coordinator

Encl 1: Draft Environmental Impact Assessment (EIA) Review report (5 copies)

Encl 2: Comment Response Sheet

PMC Chennai Office Address:

13th Floor, Purva Primus, No 236, Okhiyampettai, Old Mahabalipuram Road, Thoraiakkam, Chennai, Tamil Nadu 600097

+91 044 66973300 | indiabd@smec.com | www.smec.com

S. No	Queries from CMWSSB vide email, dated 03.08.2020	Action Taken Report / Reply to Queries
1.	Under clause no.1.2, kindly rename the clause 1.2, Table 1 and also correct the scope of CP2.	The Scope for CP2 is revised as per MoD pg.no. 49 which includes only Pumping station at Perur DSP
2.	Kindly check the IS 1893 for its latest revision in Table 2.	The latest version is IS: 1893 – 2016 , Part 1 Criteria for Earthquake resistant Design of Structures. Accordingly, the Project area falls under Seismic Zone – III.
3.	In Table 6, it has been mentioned that the project site located in designated forest land, whereas it is not so. Kindly correct it.	<p>The proposed land for Perur DSP is not the forest land. The land belongs to the Hindu Religious and Charitable Endowments Department (HR & CE) department of GoTN.</p> <p>As per G.O.(Ms) No.157 dated 29th April 2016, the trees are planted by the Forest department in HR & CE department's land. The Casuarina tree cutting shall be carried out as per the following conditions decided and ordered by GoTN in G.O</p> <ul style="list-style-type: none"> • Casuarina plantation of 9 years old has been planted by the Forest Department on the sharing basis agreement of 30% for the Forest Department and 70% for the Trust (Land Owner of the Perur site). • CMWSSB has to contact the Forest Department or TNPL (Tamil Nadu Newsprint and Papers Limited) to determine the value of the Casuarina trees. • Compensation amount for the loss of the Casuarina plantation in the rented land should be paid as a single instalment by the CMWSSB to the Trust. <p>Accordingly, Table -6 is updated.</p>
4.	In Table 7, it has been mentioned that for site clearing, Department of Forest and District Collector is Statutory authority, whereas the project site belong to HR&CE Department.	<p>The proposed land for Perur DSP is not forest land. The land belongs to the Hindu Religious and Charitable Endowments Department (HR & CE) department of GoTN.</p> <p>However cutting of specific species of trees eg. Sandalwood will come under the perview of Forest department irrespective of the ownship of land. Accordingly, Statuary authority for Tree cutting permission/ Intimation is Forest Department, Government of Tamil Nadu.</p> <p>It may please be noted that as per Tamil Nadu government's Forest department - <i>Procedure for permission/ intimation for felling of trees</i>, cutting of Casuarina tree species is exempted from the requirement of permission.</p>
5.	As discussed on 03.06.2020, PMC is requested to identify the appropriate	Please refer Annexure – I.

S. No	Queries from CMWSSB vide email, dated 03.08.2020	Action Taken Report / Reply to Queries
	Shoreline erosion control and management plan framed by State government for the proposed 400MLD Desalination Plant at Perur during construction and post construction phases and accordingly, the S. No.(i) of Table 9 may be corrected.	
6.	The status of data collection in Table 4 may be updated as on date.	Table updated based on the data received.

ANNEXURE - I

CRZ Condition	Conclusions from Studies submitted for CRZ clearance	PMC conclusion and recommendation
<p>As per CRZ environmental clearance Part A-Specific conditions (i) :</p> <p>"The project proponent shall implement the shoreline erosion control and management plan framed by the State government, as may be applicable in the area."</p>	<p>It may be noted that in the Additional details documents submitted to MoEF &CC for obtaining CRZ clearance for 400 MLD Perur DSP the following were observed (Pg.no. 77 to 104).</p> <p>1) <u>Findings of the Study on Shoreline report</u> concludes as mentioned below:</p> <p>In the present development of Phase II and Phase III desalination plants, construction of bund does not arise as the pipeline is going to be buried. The intake and outfall pipelines will be buried in the seafloor at a depth of minimum 1.0 m below the seafloor. The littoral drift will not be obstructed due to the burial of pipelines.</p> <p>Hence there will not be any impact on the shoreline and erosion due to the proposed development.</p> <p>2) <u>Findings of Mathematical modelling report on Impact of Shoreline due to the laying of Submarine pipelines for 150 MLD and 400 MLD seawater desalination plants</u></p> <p>concludes as mentioned below:</p> <p>The mathematical modelling study shows that there is no change in sediment transport flux and return no changes in bed level due to the laying of intake and outfall pipelines. Further, the pipeline will be buried below the seabed, and hence the bed profile will maintain its equilibrium conditions. Therefore, the laying of pipelines will not cause any change in coastal morphology and the seabed. Also, it will not cause any significant change in the current flow.</p>	<p>Based on the reports findings, it was clear that the Shoreline near Perur DSP is quite stable and no Shoreline erosion control with Boulders and Groins, etc., would be required to be implemented.</p> <p>Further, the condition of MoEF &CC only indicates as may be applicable in the area.</p> <p>As per the PWD report, Government of Tamil Nadu (pg. 34) it is indicated that "A significant stretch of coast south of Kovalam has a wide beach conducive for plantations as a long-term measure for protecting the coast."</p> <p>However, as a precaution - PMC proposes to include the conditions in Bid document:</p> <p>(i) Laying of offshore Pipelines to be taken up only during the calm seasonal months (typically between January to April) to avoid any Shoreline erosion.</p> <p>(ii) The offshore activities carried out by the bidder should not cause any coastal erosion and alter the beach configuration.</p> <p>GPS survey would be carried out in 1km stretch of Perur plant in North and South direction for monitoring of any shoreline changes. This scope is proposed to be included in any one reputed Academic institutions and research institutes viz., NIOT Chennai, IIT Madras, NCSCM - Anna university.</p>