

## **ABSTRACT**

Hogenakkal Water Supply and Fluorosis Mitigation Project - Supply of safe and potable drinking water from river Cauvery to 3 Municipalities, 17 Town Panchayats and 6755 rural habitations in 18 Panchayat Unions in Dharmapuri and Krishnagiri Districts with Loan Assistance from JICA (Japan International Co-operation Agency) - Revised Administrative Sanction for Implementation of the Project at a cost of Rs.1928.80 crores - Orders issued.

Municipal Administration and Water Supply (WS4) Department

G.O. (Ms) No.19

Dated:29.01.2010 Read again:

1. G.O. (Ms) No.26, Municipal Administration and Water Supply (WS4) Department, dated 25.02.2008.

### Read also:

- 2. From the CMD, TWAD Board Lr. No.18208/AE1/PMU/HWS&FMP/2009, dated 24.06.2009
- 3. From the Chairman and Managing Director, Tamil Nadu Water Supply and Drainage Board Ir.No.18208/AE1/ PMU/ HWS& FMP/ 2009, Dated: 15.10.2009
- 4. From the JMD &PD, HWS&FMP, TWAD Board Lr. No. 18208/ AE/ PMU/ 2009 Dated:05.12.2009.

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## **ORDER:**

In the Government Order first read above, orders were issued according in principle approval for implementation of the Hogenakkal Water Supply and Fluorosis Mitigation Project in 3 Municipalities, 17 Town Panchayats and 6755 rural habitations in 18 Panchayat Unions of Dharmapuri and Krishnagiri districts at a cost of Rs.1334.00 crores to install and Rs.51.65 crores to maintain annually and to implement the Phase I of the Project at a cost of Rs.959.20 Crores with loan assistance of JBIC (Japan Bank for International Co-operation) Rs. 785.50 crores and MNP fund of Rs 173.70 crores. It was also ordered that after completion of this project, the deficit amount on the above project will be met out by the Government as subsidy.

2. The Government also permitted the Tamil Nadu Water Supply and Drainage Board to engage a project management consultant as per the procedure of Japan Bank for International Co-operation (JBIC) and the Government further requested the Chairman and Managing Director, Tamil Nadu

Water Supply and Drainage Board to take necessary action to get the loan from the JBIC to implement the phase II of the scheme.

- 3. In his letter second read above, the Chairman and Managing Director, TWAD Board has stated that due to various reasons the cost of the scheme has increased and requested the Government to accord revised administrative sanction for Rs.1928.80 Crores with loan assistance from JICA (Rs.1585.60 Crores) and from MNP Funds (Rs.307.48 Crores) and from Urban Local Bodies share (Rs.35.72 crores) to install and Rs.63.67 Crores to maintain annually.
- 4. This Project was sliced into two Phases by JICA for ease of providing loans due to the fiscal budget constraints of the Japanese ODA loan during March 2008. Accordingly Loan agreements were signed on 10<sup>th</sup> March 2008 for phase-1 for Rs 899.10 Crores and on 31.3.2009 for Phase 2 for Rs 686.50 Crores respectively.
- 5. The Chairman and Managing Director, TWAD Board has also informed that the consortium under the head of M/s. Nippon Koei Limited, Japan has been appointed as consultant for the scheme and project implementation works have been commenced from 3.10.2008. The Project comprises of the following 5 packages:-
- Package I Raw water Intake, Water Treatment Plant, Raw water and treated water transmission main to a length of 11.50 Km, Booster , Master Balancing Reservoir (MBR) and SCADA
- Package II Trunk Main from MBR at Madam to Uthangarai, Feeder Mains etc to a length of 2467 Km covering 1698 habitation in 5 unions viz Pennagram, Nallampalli, Dharmapuri, Mathur and Uthangarai, 2 Town Panchayats viz Pennagram and Uthangarai and Dharmapuri Municipality
- Package III Branch Trunk Main from Trunk Main to Package II, Feeder Mains etc to a length of 1463 Km covering 1035 habitation in 3 unions viz Murappur Harur and Pappireddipatti, 5 Town Panchayats viz B.Mallapuram, Harur, Kadathur, Kambinallur and Pappireddipatti
- Package IV Pumping Main from Common Booster Station to a length of 2337 Km covering 1631 habitation in 5 unions viz Veppanapalli, Kelamangalam, Thally, Sulagiri and Hosur, 3 Town Panchayats viz Mathgiri, Kelamangalam and Denkanikottai and Hosur

# Municipality

# Package V Common Trunk Main from MBR at Madam to Palacode for Packages IV & V, Feeder Mains etc to a length of 4654 Km covering 2391 habitation in 5 unions viz Palacode, Karimangalam, Bargur, Krishnagiri and Kaveripattinam, 7 Town Panchayats viz Kairimangalam, Marandahalli, Palacode, Paparapatti Bargur, Kaveripattinam Nagojanahalli and Krishnagiri Municipality

- 6. The Chairman and Managing Director, TWAD Board has further stated that due to the following reasons the cost of the project has increased from Rs.1334.00 Crores to Rs. 1928.80 Crores:-
  - Water mains from the Master Balancing Reservoirs of Union Panchayats, have been redesigned due to elevation difference and accordingly suitable type, class and size of pipes have been proposed, which has resulted in the major cost escalation of the project
  - 2. To ensure the adequate quantity of water supply to the end village beneficiaries, adequate provision for storage of water at the territorial panchayat MBRS have been proposed resulting in the increase in costs.
  - 3. Higher duty pump sets have been proposed along with other structures like pipe carrying bridges, increase in the capacity of Master Balancing Reservoirs etc. The details have been provided in the report accompanying the estimate.
  - 4. Treatment of the sludge from the water treatment plant and for proper safe disposal arrangement has been proposed.
  - 5. High tension electrical equipments have been proposed.
  - 6. Pipe size and pipe material have been modified while redesigning the gravity transmission main, internal transmission main and internal network for shut off head.
  - 7. Separate out-let and up-gradation of type and class of pipe have been necessitated because of high elevation difference between the habitations.
  - 8. Provision of one more booster station with pump set which is essentially required to reduce the high head.
  - 9. Rates have been revised to the Current Year Schedule of Rates.
  - 10. The Variation in the exchange rates of Indian Rupees vis-a-vis Japanese Yen also contributed to the increase of the cost of the project.

- 7. The Chairman and Managing Director, TWAD Board has stated that due to the above reasons, agreement has been signed between the officials of JICA, Government of India and Government of Tamil Nadu for the revised project cost of Rs.1928.80 crores. The project was also divided into two phases by the JICA for facilitating smooth release of financial assistance.
- 8. The total proportionate cost to be borne under Phase I and Phase II of the project by the JICA, State Government and Urban Local Bodies are as follows:-

(Rs. in crores)

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	Phase I	Phase II	Total
1. Japan International Co-operation Agency (JICA) Loan assistance	1117.26	468.34	1585.60
2. Minimum Needs Programme Fund	220.07	87.41	307.48
3. Shares of Urban Local Bodies	25.57	10.15	35.72
Total	1362.90	565.90	1928.80

- 9. The Chairman and Managing Director, Tamil Nadu Water Supply and Drainage Board has therefore sent proposals for according revised administrative sanction for implementation of the Hogenakkal Water Supply and Fluorosis Mitigation Project at a cost of Rs. 1928.80 Crores (for both Phase I &II) to install and Rs.63.67 Crores to maintain annually (JICA = Rs.1585.60 Crores and MNP and ULB share = Rs.343.20 Crores) and to commence the fieldwork by March 2010 and to complete the project before December 2012.
- 10. The JMD&PD, HWS&FMP in his letter fourth read above has stated that generally for Water Supply Schemes implemented by TWAD, the Contractor has to carry out O&M for the first year, for which no separate payment is made. But the cost of electricity charges is paid by TWAD, for which provision is made in the estimate while according administrative sanction and that in the case of Hogenakkal Water Supply and Fluorosis Mitigation Project, the annual O&M expenditure for Hogenakkal WS&FMP was estimated as Rs.51.65 Crores. Taking into consideration that 100% bulk water tariff collection and interest from HSC deposit, the deficit in O&M has been worked out as Rs.17.60 crores in the year

2012 and Rs.1.70 crore in 2021. This working of deficit is based on the levying of Bulk water charges at Rs.7.88 per KL for urban, Rs.5.25 per KL for rural and Rs.105 per KL for commercial users (against the present tariff of Rs.4.50, 3.00 & 60.00 per KL respectively) by TWAD on commissioning of the project in the year 2012 and subsequent annual increase of tariff at 5%.

- 11. In the letter fourth read above, the JMD&PD, HWS&FMP has requested that subsidy of Rs.95.00 crores at Rs.9.50 Crore per annum from the State Government Revolving Funds may be provided. In G. O. first read above, the Government has committed that the required subsidy will be allocated to maintain the project. Operation and Maintenance cost of the Hogenakkal Project for the initial five years for all the five packages has been included in the Bill of quantity (BOQ). Since JICA is not agreeing to fund for the O&M of the project, the O&M has to be covered under MNP fund.
- 12. As the initial five years maintenance period has been covered under contractors scope, the cost of maintenance personnel, consumables, spares, etc. included in the tender are to be paid to the contractors apart from the Cost of TWAD personnel, electricity charges, etc., to be paid by TWAD Board.
- 13. The Joint Managing Director & Project Director, Hogenakkal Water Supply and Fluorosis Mitigation Project has also stated that an estimate for the O&M has been prepared which works out to Rs.63.67 Crores against Rs.51.65 Crores originally proposed. The increase in cost is due to the following reasons:-
  - (1) Introducing intermediate Booster and Maintenance staff required for the Booster
  - (2) Electrical Charges increase due to the intermediate Booster
  - (3) Providing SCADA (Supervisory Control and Data Acquisition) system.
- 14. The electrical consumption charges alone will be Rs.50.87 Crores out of Rs.63.67 Crores which is 80% of the total O & M cost. The establishment charges will be Rs.8.50 Crores, which is 13.35 % of the total O&M cost. The remaining cost will be towards royalty charges payable to PWD, way-levy charges payable to Forest Department, communication, repairs and renewals etc.
- 15. The Joint Managing Director and Project Director, Hogenakkal Water Supply and Fluorosis Mitigation Project in his letter fourth read above has informed that payments have to be made to the Contractor for the Operation and Maintenance period of all the five Packages for five years and that therefore it is necessary to accord administrative sanction for the O &M estimate for the 5 years .The total Operation and Maintenance cost for 5 years will be Rs.318.35 Cr (Rs.63.67 Cr x 5 years). It is proposed to collect water charges from the beneficiaries as per the tariff fixed by the Government and there will be a wide gap between the quantum of water charges and the actual expenditure incurred

as already forecast by TNUFISL. He has stated that the water charges collected will be deposited to the Government account or retained in TWAD account for adjusting against the subsequent expenditure. In view of the fact that bid document has been approved by JICA including the maintenance of the scheme by the contractor for five years from the date of commissioning, he has requested that the Operation and Maintenance may be borne by the Government for five years.

- 16. (i) The Government have carefully examined the proposals in the letters second to fourth read above and they accord revised administrative sanction for implementation of the Hogenakkal Water Supply and Fluorosis Mitigation Project in two phases at a total cost of Rs.1928.80 crores with loan assistance of JICA (Japan International Co-operation Agency) (Rs.1585.60 Crores) and Tamil Nadu State's Minimum Needs Programme (Rs.307.48 Crores) and Urban Local Bodies share (Rs.35.72 crores) to provide safe and potable drinking water from river Cauvery to the people of Dharmapuri and Krishnagiri Districts in the 3 Municipalities, 17 Town Panchayats and 6755 rural habitations in 18 Panchayat Unions in both the Districts.
- (ii) The Governemnt also accord sanction for Rs.318.35 crores for Operation and Maintenance cost for 5 years at the rate of Rs.63.67 crores per annum for the above scheme subject to the condition that the amount collected by the Tamil Nadu Water Supply and Drainage Board from the beneficiaries should be deducted while releasing funds to Tamil Nadu Water Supply and Drainage Board towards Operation and Maintenance cost as approved above.
- 17. This order issues with the concurrence of Finance Department vide its U.O. No. 4268/Fin(MAWS)/2010-1, dated: 28.01.2010.

# (By order of the Governor)

# NIRANJAN MARDI SECRETARY TO GOVERNMENT

To

The Chairman and Managing Director, Tamil Nadu Water Supply and Drainage Board, Chennai.5

The Project Director, Hogenakkal Water Supply and Fluorosis Mitigation Project, Tamil Nadu Water Supply and Drainage Board, Chennai-5.

The Secretary to Government, Finance Department, Chennai-9.

The Secretary to Government, Rural Development & Panchayat Raj Department, Chennai-9.

The Secretary to Government, Planning Development & Special Initiatives Department, Chennai-9.

The Secretary to Government, Public Works Department, Chennai-9.

The Secretary to Government, Health & Family Welfare Department, Chennai-9.

The Director of Municipal Administration, Chennai-5.

The Director of Town Panchayats, Chennai-108.

The Commissioner, Rural Development & Panchayat Raj Department, Chennai-15

The Director, Public Health and Preventive Medicines, Chennai-6.

The Collector, Dharmapuri District.

The Collector, Krishnagiri District.

## Copy to:

The Finance (EAP/MAWS) Department, Chennai-9.

The Senior Personal Assistant to Hon'ble Deputy Chief Minister, Chennai-9.

The Senior Personal Assistant to Hon'ble Minister for Finance, Chennai-9.

The Senior Personal Assistant, Office of the Chief Minister, Chennai-9. Sf/sc

// Forwarded by order//

**Section Officer**