## WEST BENGAL STATE COASTAL ZONE MANAGMENT AUTHORITY

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To :-

1. The Addl. Chief Secretary, Department of Urban Development & Municipal Affairs, Govt.of WB. - **Member** <u>secy.ma-wb@gov.in</u>

2. The Principal Secretary, Department of Fisheries, Govt. of WB. - Member. prsecy.fisheries@gmail.com

3. The Principal Secretary, Department of Sundarban Affairs, Govt. of WB. - Member prsecysad5@gmail.com

4. The Addl. Principal Chief Conservator of Forests & Director, Sundarban Biosphere Reserve, Directorate of Forests, Govt. of WB. — Member. wbwildlife@gmail.com

5. Sri Sandip Chatterjee, Ex-Engineer-in-Chief, Dept. of Public Health Engineering, GoWB. — **Member.** sandip1952@gmail.com

6. Dr Parthasarthi Chakraborty, Former Chief Scientist, Geo-informatics and RS Cell, Deptt. of Science & Technology, GoWB. — Member. psarathic@rediffmail.com

7. Director, School of Oceanographic Studies, Jadavpur University, dir.oceanography@jadavpuruniversity.in

Sir,

Please find herewith the minutes of 10th meeting of WBSCZMA held on 24.2.2021 regarding CRZ clearance for the project of laying 18" Pipeline of Paradip-Somnathpur-Haldia by Indian Oil Corporation Limited for your kind information and necessary action.

> Chief Environment Officer, Deptt. of Environment, Govt. of West Bengal, & Member Secretary, West Bengal State Coastal Zone Management Authority.

#### Copy forwarded to :-

1. Prof. Sugata Hazra, School of Oceanographic Studies, Jadavpur University, Kol-32. Sugata Hazra sugata hazra@yahoo.com

2. Mr. Arindam Mani, Addl Director of Survey, West Bengal, Survey Building, Gopalnagar Road, Alipore, Kolkata - 700027. dds.westbengal@gmail.com

3. Ms. Subrata B Dutta, Sr. Scientist, Department of Science and Technology & Biotechnology, Bikas Bhavan, 4th Floor, Kolkata - 700 091. wbdstbt@gmail.com

4. Shri Biplab Mukhopadhyay, Deputy Secretary (Works), Irrigation & Waterways Department, Govt of West Bengal, Jalasampad Bhavan, 3rd Floor, Kolkata - 700 091. biplab mukherjee05@yahoo.co.in

5. The Member Secretary, West Bengal Pollution Control Board. ms@wbpcb.gov.in

6. The Director, Institute of Environmental Studies and Wetland Management, ieswm@gmail.com contact.ieswm@gmail.com

7. Rajesh Gupta, Chief General Manager (Construction), Indian Oil Corporation Limited, Construction Office, Eastern Region Pipelines, Kolkata, Mobile No. 7389903231. P&T No. 033 46020596 / 033 22151125. rajeshgupta@indianoil.in rajeshg696@gmail.com

# MINUTES OF THE 10<sup>TH</sup> MEETING OF WEST BENGAL STATE COASTAL ZONE MANAGEMENT AUTHORITY (WBSCZMA) HELD ON 24<sup>th</sup> FEBRUARY, 2021 IN THE CONFERENCE ROOM OF DEPARTMENT OF ENVIRONMENT, GOVERNMENT OF WEST BENGAL

## The following members/officials attended the meeting:

- 1. Shri N. Singhal, Chief Environment Officer & Member Secretary of WBSCZMA
- 2. Shri K. Balamurugan, Senior Environment Officer, Environment Department
- 3. Shri Siddhartha Roy, IFS (retired), Consultant of IESWM
- 4. Shri S. Mardi, Environmental Engineer, WBPCB

## The following officials attended the meeting on behalf of project proponents:

- 5. Shri Ranu Ram, Chief General Manager (Construction) of Indian Oil Corporation
  Limited
- Shri Sunil Kumar Agarwal, Chief Construction Manager of Indian Oil Corporation Limited.
- 7. Shri Subhankar Sau, Construction Manager of Indian Oil Corporation Limited.

## The following experts who were virtually present were:

- 8. Dr Parthasarthi Chakraborty, Former Chief Scientist, Geo-informatics and RS Cell, Deptt. of Science & Technology, GoWB. Member
- 9. Prof. Sugata Hazra, Director, School of Oceanographic Studies, Jadavpur University, Kol-32
- 10. Smt. Tripti Shah, Representative of IESWM

#### Agenda:

The agenda of the meeting was CRZ Clearance for installation of 18" Diameter Paradip-Somnathpur-Haldia Pipeline by Indian Oil Corporation Limited.

#### Proceedings:

The Chief Environment Officer & Member Secretary of WBSCZMA welcomed everybody and initiated the discussion. In memory of the departed soul of ex-expert late Amaresh Chowdhury two minutes silence was observed.

#### **Project Brief:**

The proposed pipeline would cross two CRZ applicable locations in West Bengal i.e. (i) Rasulpur river and (ii) Haldi river. Pipeline Alignment falling in CRZ areas in West Bengal are as detailed below;

Location	NDZ (Ha)	CRZ I (Ha)	CRZ II (Ha)	CRZ III (Ha)	CRZ IV (Ha)	Total Area (Ha)
Rasulpur River	0.65	0.19	0	0	0.10	0.94
Haldi River	0.12	0.48	0.19	0	1.14	1.93

There is only one Eco-sensitive area on Western bank of Haldi river, where proposed pipeline will pass through small patch of mud flat coming under CRZ-I(A) having length of 8 metres. However, the pipeline shall be laid at a depth of 20 metres below the river bed without disturbing the surface of the river.

Thereafter the Project Proponent gave a Power Point presentation regarding the project stating that;

(1) This Pipeline originates from Paradip Pumping Station and terminates at Haldia Refinery (Delivery Station) of IOCL with intermediate delivery station at Somnathpur Depot for optimal transportation of petroleum products viz. Motor Spirit, High Speed Diesel & Superfine Kerosene Oil at an estimated total cost of Rs1332 crore (Estimated cost at West Bengal Rs292.85 crore).

- (2) The total length of pipeline will be 344 km. The pipeline length in West Bengal will be 96 km passing through 10 Blocks in the district of Purba Medinipur.
- (3) During its course the pipeline will cross two major rivers viz. Haldi river and Rasulpur river in West Bengal.
- (4) The proposed Pipeline will be laid down at a depth of 10 to 15 metres below the river bed surface by Horizontal Direction Drilling Method without disturbing the surface of the rivers.
- (5) Following mitigation measures will be taken during construction and operation as confirmed by the Project Proponent.
  - Dust suppression will be done by sprinkling water.
  - b. DG sets will be installed with wet scrubber for controlling gaseous emission.
  - c. To counter accidental oil-spill SCADA system (Supervisory Control & Data Acquisition System) & LDS (Leak Detection System) will be installed on the pipeline and will be monitored round the clock remotely from three locations i.e. at Paradip, Somnathpur & Haldia.
  - d. Two remotely controlled Sectionalizing Valves will be installed on either side of the rivers. In case of any leakage, the valves will be closed remotely to isolate the section.
  - e. Fire hazards have been assessed using PHAST (Process Hazard Analysis Software Tool) by IOCL.
  - f. Noise level will be minimal during construction. PPE kits will be provided to the workers during construction. The first-aid kits will also be ensured at construction sites.
  - g. Tree plantation will be taken up during operation of the pipeline.
  - h. A sum of Rs. 4 crore in respect of Corporate Environment Responsibility have been allocated from the approved project budget for the state of West Bengal.
  - For oil-water separation the existing Effluent Treatment Plants at Paradip & Haldia will be used to ensure that only clean effluent is released outside the plant. Oil Water Separator will be installed at Somnathpur station.

#### Deliberation:

After the presentation was over the following issues were raised;

- (1) The CEO asked IOCL to submit the Environment Management Plan (EMP) consisting year-wise allocation of funds for tree plantation etc. immediately. The CEO also requested the expert members to send their valuable comments by e-mail.
- (2) The experts wanted to know how the contractors will be selected, whether they will have state-of-the-art machineries for doing such deep drilling of more than 1.5 km length?
   2 —

- What precautionary measures will be taken while drilling and laying of pipeline (3)without disturbing natural vegetation or mud flat. Disaster management mechanism of any accidental spillage or natural calamity such (4)as Tsunami, cyclone, earthquake etc. Any structure/disturbance would be made on both the sides of river, where the (5)Sectionalizing valve will be placed. Reply from the Project Proponent: (1) EMP consisting year-wise allocation of funds for tree plantation etc. shall be submitted by 25.02.2021 (2) Contractors will be selected judiciously having previous experience of Horizontal Direction Drilling Method. IOCL has completed similar type of crossings having length more than the Haldi River by using Horizontal Directional Drilling method earlier successfully. (3) Pipeline will be laid by state of the art mechanism i.e. Horizontal Directional Drilling Method below 10 to 15 m depth from river bed without disturbing the surface of the
  - (4) Disaster management mechanism against any accidental spillage or natural calamity are as per below;
    - a. The proposed Pipeline will be able to withstand any storm impact even Tsunami & earthquake etc. during operation as the pipeline design is done by following the stringent American Petroleum Institute (API) standards. The external surface of the pipeline will be protected by providing 3 layer polyethelene coating. Additionally, cathodic protection system will also be installed to prevent corrosion of pipeline.
    - b. SCADA, LDS, Remote Control Sectionalizing Valves will be installed to detect sudden pressure drop and to immediately shut down the valves by remote control.
    - c. Regular Patrolling and monitoring of Pipeline will be done on 24x7 basis through DGR guards equipped with GPS enabled devices.
    - d. To avoid any untoward incident round the clock dedicated teams of DGR guards will be deployed during operation of the pipeline. The DGR guards will be equipped with GPS instrument.
    - e. Emergency response vehicles are being maintained at all the stations which can be mobilized immediately. The expert teams are also designated to meet any exigency.
    - f. IOCL maintains MOSRU (Mobile Oil Spill Recovery Units) at stations which can be used for collecting spillage of oil on the ground during any exigency.
    - g. Fire tenders, Foam tenders, Oil Absorbent pads & oil dispersants etc. are also being maintained at all the stations to meet any exigency.
    - (5) A small building with boundary wall all around the building will be constructed at sectionalizing valve locations on the both side of the river around 4 km away from the river bank.

## Action Point:

On behalf of the Project Proponent the Consultant team informed that they will submit the EMP including the mitigation measures as per the Environment Impact Assessment and Risk Analysis for this project on 25.02.2021.

The meeting then ended with vote of thanks to and from the chair.

Chief Environment Officer, Dept. of Environment, Govt. of West Bengal, & Member Secretary,

West Bengal State Coastal Zone Management Authority