APPL/MoEF/01/2026
16.02.2026

To,
The Director
Ministry of Environment, Forest & Climate Change
Pryavaran Bhawan
Jor Bagh Road
New Delhi - 110003

Subject : Six monthly reports on the status of compliance of the stipulated EC conditions including environment safeguard monitoring report for Cargo Handling Project at Lavgan, Dist. Ratnagiri, state-Maharashtra.

Reference :
1. MoEF Clearance Letter No. 11-55/2007-IA.III, Dated 25th October 2010.
2. MoEF Clearance Letter No. 11-55/2007-IA.III, Dated 30th January 2019

Dear Sir,

With reference to the above we are submitting herewith our six-monthly compliance report as per the condition lead down in the above reference environmental clearances. The compliance report for the period of 1st July 2025 to 31st December 2025 for your kind perusal.

Thanking you

For Angre Port Private Limited

Angre Port Pvt. Ltd.

Authorized signatory

Copy to.:

1. The Regional Office, Ministry of Environment, Forest & Climate Change, Ground Floor, Easte Wing, New Secretariat building, Civil Lines, Nagpur 440001
2. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd & 4th Floor, Opp. Cineplanet, Near Sion Circle Sion East Mumbai 400022
3. The Chairman, CPCB Parivesh Bhawan, CBD – Cum Office Complex, East Arjun Nagar, New Delhi – 110032
4. The Sub- Regional Officer, MPCB Ratnagiri

SIX MONTHLY COMPLIANCE REPORT

Submitted to

Ministry of Environment, Forests,
and Climate Change

Of

"Cargo Handling Project"

At

Village Sande Lavgan, Post Jaiagd,
Taluka and District Ratnagiri, Maharashtra, 415614

By

M/s. Angre Port Pvt. Ltd.

For

Period: 1st July to 31st December 2025

WE THINK GLOBAL
ANGRE PORT PRIVATE LIMITED
Registered Office : Survey No. 39/5, Village - Sandelavgan,
Post -Jaigad, Tal & Dist- Ratnagiri 415614. Maharashtra India.
CIN : U63032MH2003PTC335797
Corporate Office : Floor No4, Casa Del Sol, Near Marriot Resort,
Miramar, Panjim, Goa , 403 802. India.

CHOWGULE GLOBAL

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

Ministry of Environment, Forest and Climate Change

Regional Office (W) Bhopal

Monitoring Report

Part-I

DATA SHEET

Sr. No	Particulars	Details
1	Name of the project	Environmental Clearance for developing a Cargo Handling Facility at Jaigad, District Ratnagiri, Maharashtra by M/s. Angre Port Pvt.Ltd.
2	Location	Jaigad, District Ratnagiri, Maharashtra
3	Address for correspondence	M/s Angre Port Pvt Ltd Bakhtawar, 4th Floor, Nariman Point Mumbai - 400021, Maharashtra
4	Environmental Clearance letter No & date	a. Environmental Clearance for developing a Cargo Handling Facility at Jaigad, District Ratnagiri, Maharashtra by M/s. Jaigad Ports Infrastructure Pvt. Ltd. Vide No.-F.No11-55/2007-IA.III dated 25th October 2010 b. Environmental Clearance for Developing a Cargo Handling facility at Jaigarh, District Ratnagiri, Maharashtra - Amendment in Environmental clearance and change in name from M/s Jaigad Ports Infrastructure Pvt Ltd to M/s Angre Port Pvt. Ltd. Vide No- F. No. 11-55/2007-IA-III dated 30th January 2019 Clearance letter attached as **Annexure-I**
5	Contact no of office with name of responsible official	Mr. Vikram Singh Designation- Executive - HSE Mobile No- 9561119630
6	a. Project cost as originally planned & subsequent revised estimates & the years of price reference. b. Allocations made for environmental management plans, with item wise & year wise breakup.	a. Cost of project- 438.74 Cr. b. EMP Cost During Construction phase- Rs. 30,00,000/- During Operation Phase-Rs. 8,50,000/-
7	Date of commencement (Actual and/or planed)	Not Applicable
8	Date of completion (Actual and/or planed)	Not Applicable
9	Status of Consent	Attached as **Annexure-II** Renewal of Consent to Operate- Format 1.0/CAC/UAN No.MPCBCONSENT-0000219659/CR/2412000173 Dated 03.12.2024 **Consent to Establish for Expansion –** Format 1.0/CAC/UAN No. 0000231311/CE/2504003465 Dated 30.04.2025

10	Reason for the delay if the project is yet to start	Not Applicable
11	Email ID of the contact person to whom communications.	Mr. Vikram Singh Mail Id- safety@angreport.in

Environmental Clearance for developing a Cargo Handling Facility at Jaigad, District Ratnagiri, Maharashtra by M/s. Angre Port Pvt.Ltd.		
Sr. No.	**Conditions**	**Compliance**
Specific Conditions:		
i.	Shore line changes shall be monitored periodically (Every 3 months for a period of 2 years) and a report shall be submitted to the ministry.	Noted & complied. Monitoring reports attached as **Annexure-III**
ii.	The cargo handling facility shall be carried out within the port area.	Noted & complied. The cargo handling facilities is carried out with in the port area only.
iii.	Necessary funds shall be allocated for the construction / development of facilities like schools, hospitals for physically disabled under Corporate Social Responsivities (CSR).	Agreed & Noted, however at present we are not liable for CSR activities.
iv.	The response/commitments made during public hearing should be complied with letter & spirit.	Noted & agreed The Copy of Public Hearing minutes and undertaking regrading response / commitment made during public hearing is attached **Annexure- IV**
v.	All the recommendation of EMP/DMP shall be strictly complied with.	Noted & agreed
Ivi.	All the conditions stipulated by MCZMA vide letter no MCZMA 2008/CR/TC II, dated 29.12.2008 shall be strictly complied with.	Noted & complied.
vii.	All the information submitted vide letters dated 28.09.2008, 20.06.2008 & 30.03.2010 & presented during the meetings held on 22nd -24th August 2007, 22nd -23rd October 2008 & 25th -26th February 2010 shall be strictly complied with.	Noted & complied. Undertaking regarding all the information submitted vide letters dated 28.09.2008, 20.06.2008 & 30.03.2010 & presented during the meetings held on 22nd -24th August 2007, 22nd -23rd October 2008 & 25th -26th February 2010 will be strictly complied attached **Annexure- V**
viii.	No construction works other than those permitted in Costal Regulation Zone notification 1991, shall be carried out in Coastal Regulation Zone area.	Noted & complied. No any construction works other than permitted area.
ix.	Oil spills if any shall be properly collected and disposed as per the rules.	Noted & complied. Oil spills is collected properly & disposed as per rules. Oil Spill Contingency Plan attached **Annexure- VI**
x.	The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be farmed.	Noted & complied. All the demarcated with lighted buoys for safety navigation are provided. Photos attached for as **Annexure- VII**

xi.	The project proponent shall set up separately environmental cell for effective implementation of the stipulated environmental safety guards under the supervision of a Senior Executive.	Noted & complied. A separate environmental management cell has been set up under the supervision of a Senior Executive for effective implementation of the stipulated environmental safeguards for the project.
xii.	The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environmental Management Plan for such mangrove development.	Noted & will be complied. Greenbelt will be developed wherever possible. Adequate budget shall be provided in Environment Management Plan.
xiii.	The funds earmarked for environmental management plan shall be included in the budget & this shall not be diverted for any other purposes.	Noted & complied. A separate budget provided for environment management and the fund shall not be diverted for any other purposes.
General Conditions:		
i.	Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.	Noted & complied. Project is in operation phase; no construction workers present on site. Adequate infrastructure facilities i.e.: Water Supply, Fuel and Sanitation has been provided to construction workers during the construction phase of the project.
ii.	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.	Noted & complied. Appropriate measures have been taken while undertaking digging activities to avoid any degradation of water quality.
iii.	Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:	Noted
a.	No excavation or dumping on private property is carried out without written consent of the owner.	Noted & Agreed No excavation work involves in project. Site photographs attached as **Annexure-VIII**
b.	No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.	Noted & Agreed No excavation work involves in project. Site photographs attached as **Annexure- VIII**
c.	Excavation work shall be done in close consultation with the soil conservation and watershed development agencies working in the area, and	Noted & Agreed No excavation work involves in project. Site photographs attached as **Annexure- VIII**
d.	Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured, so that they shall not leach into the ground water.	Noted & complied. Construction spoils including bituminous material and other hazardous materials is not be allowed to contaminate water courses and such materials & disposed off in compliance to the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016 as amended.

iv.	The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.	Noted. The material for reclamation shall be from the dredged material and the rest shall be sourced from the approved Government areas in the vicinity, whenever required.
v.	Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.	Noted & agreed. Adequate precautions has been taken during transportation of the construction material so that it does not affect the environment adversely.
vi.	Full support shall be extended to the officers of this ministry / regional office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.	Noted & complied.
vii.	Ministry of environment and forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary, in the interest of environment and the same shall be complied with.	Noted & agreed.
viii.	The ministry reserves the right to revoke this clearance in any of the conditions stipulated are not complied with the satisfaction of the ministry.	Noted & agreed.
ix.	In the event of a change in project profile or change in the implementation agency fresh reference shall be made to the ministry of Environment and Forests.	Noted & agreed.
x.	The project proponents shall inform the regional office as well as the ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development.	Noted & being complied.
xi.	Maharashtra Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's Office/Tehsildar's Office for 30 days.	Noted & complied.
8.	These stipulations would be enforced among others under the provisions of water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act,1986, the public liability (Insurance) Act,1991 and EIA Notification	Noted & complied. We will comply with the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Public Liability (Insurance) Act 1991 and EIA notification 1994, including the amendments.

	1994, including the amendments and rules made thereafter.	
9.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.	Noted & complied. All the applicable clearances has been obtained for the project.
10.	The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded CRZ Clearance and copy of clearance latter is available with the state pollution control board and may also be seen on the website of the ministry of environment and forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the regional office of this Ministry at Bhopal.	Noted & Complied Advertisement was published in Maharashtra Newspaper "Tarun Bharat" dated 19th December 2009 and "Tarun Bharat" dated 21st January 2010 is attached as **Annexure- IX**
11.	Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ petition (civil) No.460 of 2004 as may be applicable to this project.	Noted & complied.
12.	Any appeal against this Environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 1997.	Noted & complied.
13.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban local body & the local NGO, if any whom suggestions/representations. If any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Noted & complied. A copy of clearance letter was sent to Group Grampanchayt Kasari & Group Grampanchayt Sakhar Mohalla. **Annexure- X**

14.	The proponent shall be uploaded the status of compliance of the stipulated EC conditions, including results of monitored data on their website & shall update the same periodically. It shall simultaneously be sent to the regional office of MoEF, the respective Zonal office of CPCB & the SPCB. The criteria pollutant levels namely, SPM, RSPM, SO2, NOx (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored & displayed at a convenient location near the main gate of the company in the public domain.	Noted & complied. Monitoring reports attached as **Annexure-XI**
15.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as by e-mail) to the respective Regional Office of MoEF, the respective Zonal office of CPCB and the SPCB.	Noted & being complied
16.	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned state pollution control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	Noted & being complied. We are regularly submitting environmental statement form-V. Attached as **Annexure- XII**

Annexure – I

Environmental Clearance

(1)

No. 11-55/2007-IA.III
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
CGO Complex, Lodhi Road,
New Delhi - 110 003.

Dated: 25th October, 2010

To
M/s. Jaigad Ports Infrastructure Private Limited,
Plot No.C-221, MIDC Mirjole,
Ratnagiri – 415 639.

Subject: Environmental Clearance for developing a Cargo Handling Facility at Jaigad, District Ratnagiri, Maharashtra by M/s. Jaigad Ports Infrastructure Pvt. Ltd. – Reg.

This has reference to your application No: nil, dated 16.07.2007 and subsequent letters dated 28.09.2008, 20.06.2009 and 30.03.2010 seeking prior Environmental Clearance for the above project under the EIA Notification – 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification – 2006 on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee constituted by the competent authority in its meetings held on 25th – 26th February, 2010.

2. It is interalia, noted that the project involves development of a Cargo Handling Facility at Jaigad, which is one of the 7 identified locations for the development of port facility by State Government of Maharashtra under BOOST Scheme. Jaigad harbour is located in District Ratnagiri at Latitude 17° 17' N and Longitude 73° 14' E along the southern bank of Shastri River. Approximately 110 NM south of Mumbai and 126 NM north of Goa. Generally rugged and steep cliffs of about 20 m are present. Average depths dredged upto 10m in channel. The proposed Location is inside Jaigad creek. The creek basin has adequate water depth available even under lowest tides and has well defined approach channel. Basin has natural depths for a required turning circle for easy and free movement of ships. Existing turning circle of 300 m. dia. planned for handy maximum size vessels for bulk cargo and feeder vessels upto 1000 TEU capacity. Dredging is proposed to achieve draft of 13 m in channel and berth pocket. The total quantity to be dredged is 6.0 million cubic meters. The dredging is proposed to be carried out in phases and the quantity in the initial phase will be 2.5 million cubic meters. It includes dredging for navigational channel, sand bar (700mt X 200mt) and dredging near the berth pockets. The disposal site for disposing dredged material is located to seawards at

20 meter contour at 73°08" E, 17°17" N. Total cost of the project is Rs.292 crores.

The recommended reclamation in the harbour is upto – 2.0 CD. The material for reclamation shall be from the dredged material and the rest shall be sourced from the approved government areas in the vicinity, if required. There are no mangroves or any vegetation present at the site of reclamation. There will not be any significant changes in the land use pattern because of reclamation and nor will there be any significant impact on water quality during reclamation. During Construction Phase 500 KVA supply is required while Operation phase requires 1500 KVA of supply. Total water requirement will be 50 m^3/day. Connection of water supply is from Gram Panchayat / Maharashtra Jeevan Pradhikaran. Sewerage system is connected to the drainage system of the project area.

3. It was informed by the project proponent that the ICMAM report identified Ratnagiri as hot spot, which is 20 km away from the project site. Hydrodynamic studies were also conducted which revealed that the Coastal shoreline is stable in the area and there is no erosion as this is a rocky area, so a Comprehensive Environment Impact Assessment Study based on a minimum of three season data is not required as per Office Memorandum, dated 3rd November, 2009. The High Tide Line demarcation is carried out by NIOT. HTL at the survey site was taken to be at +1.80 m (wrt MSL). CD is equivalent to low tide line is at -1.8 m from MSL. MSL reference was recovered from a permanent Bench mark situated at Jaigad Jetty. High tide line was delineated at level of +1.80 m and low tide line at -1.80 m from MSL. Cadastral map issued by local revenue authorities has been superimposed on the HTL demarcation. The MCZMA has recommended the proposal vide letter No. MCZMA 2008/CR15/TC II, dated 29.12.2008.

4. The project has been appraised by the EAC in its 70th meeting held on 22nd – 23rd October 2008 and suggested additional TOR along with public hearing under Environmental Impact Assessment Notification, 2006. The Public hearing was conducted at Sande Lavgan, District Ratnagiri on 14th July, 2009. Major issues raised in the public hearing were employment, handling of material and flooding.

5. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to its observations, have recommended for the grant of Environmental Clearance for the project. Accordingly, the Ministry hereby accord necessary Environmental Clearance for the above project as per the provisions of EIA Notification – 2006 and its subsequent amendments, subject to strict compliance of the terms and conditions as follows:

6. **Specific Conditions:**

(i) Shore line changes shall be monitored periodically (every 3 month for a period of 2 years) and a report shall be submitted to the Ministry.

(ii) The cargo handling facility shall be carried out within the Port area.

(iii) Necessary funds shall be allocated for the construction / development of facilities like schools, hospitals for physically disabled under Corporate Social Responsibility (CSR).

(iv) The responses/commitments made during public hearing should be complied with letter and spirit.

(v) All the recommendation of EMP/DMP shall be strictly complied with.

(vi) All the conditions stipulated by MCZMA vide letter No. MCZMA 2008/CR15/TC II, dated 29.12.2008 shall be strictly complied with.

(vii) All the information submitted vide letters dated 28.09.2008, 20.06.2008 and 30.03.2010 and presented during the meetings held on 22nd – 24th August 2007, 22nd – 23rd October, 2008 and 25th – 26th February, 2010 shall be strictly complied with.

(viii) No construction work other than those permitted in Coastal Regulation Zone Notification, 1991 shall be carried out in Coastal Regulation Zone area.

(ix) Oil spills if any shall be properly collected and disposed as per the Rules.

(x) The approach channel shall be properly demarcated with lighted buoys for safe navigation and adequate traffic control guidelines shall be framed.

(xi) The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.

(xii) The project proponent shall take up mangrove plantation/green belt in the project area, wherever possible. Adequate budget shall be provided in the Environment Management Plan for such mangrove development.

(4)

(xiii) The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.

7. **General Conditions:**

(i) Adequate provision for infrastructure facilities including water supply, fuel and sanitation must be ensured for construction workers during the construction phase of the project to avoid any damage to the environment.

(ii) Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.

(iii) Borrow sites for each quarry sites for road construction material and dump sites must be identified keeping in view the following:

(a) No excavation or dumping on private property is carried out without written consent of the owner.

(b) No excavation or dumping shall be allowed on wetlands, forest areas or other ecologically valuable or sensitive locations.

(c) Excavation work shall be done in close consultation with the Soil Conservation and Watershed Development Agencies working in the area, and

(d) Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they shall not leach into the ground water.

(iv) The construction material shall be obtained only from approved quarries. In case new quarries are to be opened, specific approvals from the competent authority shall be obtained in this regard.

(v) Adequate precautions shall be taken during transportation of the construction material so that it does not affect the environment adversely.

(vi) Full support shall be extended to the officers of this Ministry/ Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.

(vii) Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.

Bhopal

(viii) The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.

(ix) In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment and Forests.

(x) The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.

(xi) Maharashtra Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's office for 30 days.

8. These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.

9. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

10. The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Maharashtra State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at http://www.envfor.nic.in. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

11. Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.

12. Any appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

13. A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/Municipal Corporation, Urban Local

Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.

14. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO_2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

15. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

16. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(Bharat Bhushan)
Director (IA-III)
25.X.2010

Copy to:

1. The Secretary, Department of Environment, Govt. of Maharashtra, Mantralaya, Mumbai – 400 032.
2. The Chairman, CPCB, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi – 32.
3. The Chairman, Maharashtra Coastal Zone Management Authority, Room No.217 (Annexe), Mantralaya, Mumbai – 400 032.
4. The Chairman, Maharashtra Pollution Control Board, Mumbai.
5. The Chief Conservator of Forests, Ministry of Environment and Forests, Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No. 3, Ravishankar Nagar, Bhopal – 462016 (M.P.)
6. Guard File.
7. Monitoring Cell.

(Bharat Bhushan)
Director (IA-III)

F. No. 11-55/2007-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA.III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Date: 30th January, 2019

To,

Shri Atul Kulkarni, Director
M/s Angre Port Pvt Ltd
Bakhtawar, 4th Floor, Nariman Point
Mumbai - 400021, Maharashtra

Subject: Environmental Clearance for Developing a Cargo Handling facility at Jaigarh, District Ratnagiri, Maharashtra - Amendment in Environmental clearance and change in name from M/s Jaigad Ports Infrastructure Pvt Ltd to M/s Angre Port Pvt Ltd - reg.

Sir,

This has reference to your online proposal No. IA/MH/MIS/79453/2010 dated 19th September, 2018 submitted to this Ministry for amendment in Environmental Clearance granted vide letter F.No.11-55/2007-IA-III dated 25th October 2010 for Developing a Cargo Handling facility at Jaigarh, District Ratnagiri, Maharashtra in favour of M/s Jaigad Ports Infrastructure Pvt Ltd, in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986.

2. The proposal for grant of amendment in Environmental Clearance and change in name from M/s Jaigad Ports Infrastructure Pvt Ltd to M/s Angre Port Pvt Ltd to the above referred project was considered by the Expert Appraisal Committee (Infra-2) in its 35th meeting held on 29-31 October, 2018. During deliberation the project proponent informed the following:

(i) The project was granted Environmental Clearance vide file No. 11-55/2007-IA.III dated 25th October 2010.

(ii) Consent to establish was granted by Maharashtra State Pollution Control Board vide letter dated 26th February, 2010 & establishment was completed on 14th August, 2013. First consent to operate was granted on 19th September, 2013.

(iii) Amendment sought in EC due to change of the name of project proponent and clarification of handling the material with quantity.

3. The EAC in its 35th meeting held on 29-31 October, 2018, during deliberation noted that the proposal is for change in the name of the company and mentioning of cargo handling material details. In the EC letter dated 25th October 2010, cargo handling facilities were allowed but material was not specified. The Committee was of view that at this point defining the material to be handled will not be possible. The project proponent may approach State Pollution Control Board for mentioning it in the Consent to Operate. The Committee recommended for amendment in project

cost and change in name from M/s Jaigad Ports Infrastructure Pvt Ltd to M/s Angre Port Pvt Ltd.

4. Based on the recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accord following amendment in Environmental Clearance issued vide letter F.No.11-55/2007-IA-III dated 25th October, 2010:

S. No.	Details	As per EC issued	Amendment Granted
1.	Name of the project and project proponent	Environment clearance for developing a cargo handling facility at Jaigad, District Ratnagiri, Maharashtra by M/s Jaigad Ports Infrastructure Pvt Ltd	Environment clearance for developing a cargo handling facility at Jaigad, District Ratnagiri, Maharashtra by M/s Angre Port Pvt Ltd

5. All the other conditions contained in the MOEF&CC letter F.No.11-55/2007-IA-III dated 25th October, 2010, shall remain the same.

(Kushal Vashist)
Director

Copy to:

1) The Principal Secretary, Environment Department, Government of Maharashtra, 15th Floor, New Administrative Building, Mantralaya, Mumbai - 400 032.
2) The APCCF (C), MoEF&CC, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur - 440001.
3) The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4) The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th Floor, Opp. Cine Planet, Sion Circle, Mumbai - 400 022.
5) Monitoring Cell, MoEF&CC, Indira Paryavaran Bhavan, New Delhi.
6) Guard File/ Record File/ Notice Board.
7) MoEF&CC website.

(Kushal Vashist)
Director

Annexure – II

Consent to Operate – MPCB

&

Consent to Establish for Expansion

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/L.S.I (R46)
No:- Format1.0/CAC/UAN No.MPCB-CONSENT-0000219659/CR/2412000173

Date: 03/12/2024

To,
M/s. Angre Port Private Limited,
Sr. No. - 39/1, 39/2, 39/3, 39/5,
Village-Sande Lavgan,Post-Jaigad,

Tal & Dist-Ratnagiri.

Your Service is Our Duty

Sub: Renewal of Consent to Operate.

Ref:
1. Earlier consent granted by Board vide No.Format1.0/CAC/UAN No.0000145273/CR/2302000114 dated 02/02/2023.
2. Minutes of 10th Consent Appraisal Committee (CAC) Meeting held on 30.10.2024.

Your application No.MPCB-CONSENT-0000219659 Dated 27.08.2024

For: Grant of Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to renewal is granted for a period up to 30/09/2027**
2. **The capital investment of the project is Rs.499.54 Crs. (As per C.A Certificate submitted by industry Existing CI is-Rs. 492.89 Cr + Increase in C.I. - Rs. 6.65 Cr =Total CI- Rs 499.54 Cr)**
3. **Consent is valid for handling of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Sugar (Raw Finished)	1000000	Ton/Y
2	Containerized Product such as horticulture	50000	Ton/Y
3	Marine Products	200000	Ton/Y
4	Electronic Goods	100000	Ton/Y
5	Automobile component (Without Ship Breaking Activity)	100000	Ton/Y
6	Caustic Soda	50000	Ton/Y

Sr No	Product	Maximum Quantity	UOM
7	Sugar Allied product like liquid sugar, Molasses, Ethanol, RS ETC	250000	Ton/Y
8	Oil such as edible oil like sunflower, Palm, RBD, COP etc and Industrial oil like Furnace/base oil, Carbon block oil etc.	350000	Ton/Y
9	Acid such as Sulphuric Formic, Succinic acid etc.	100000	Ton/Y
10	Organic / Inorganic solvents,	100000	Ton/Y
11	Steel, Copper, Coils, Wires and Ropes	1500000	Ton/Y
12	Handling of Coal	2200000	Ton/Y

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	0.0	As per Schedule-I	Not Applicable
2.	Domestic effluent	8.0	As per Schedule-I	On land for gardening

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	S1	D.G Set (750 KVA)	1	As per Schedule -II

6. **Non-Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	STP sludge	500	Kg/Annum	Composting	Used as mannure

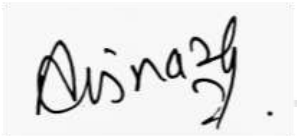
7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
1	5.1 Used or spent oil	500	Kg/Annum	Recycle	Sale to authorised party

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. The industry shall strictly follow Board Circular for Retro-Fitting of Emission Control Device (RECD) for in-use D.G. Sets vide no. MPCB/JD(APC)/NCAP/DG Set/B-0090 dtd. 02/06/2023
11. The industry shall obtain necessary permission from the Directorate of Industrial Safety and Health (DISH).
12. The applicant shall submit/extend Bank Guarantee of Rs. 25 Lakh towards O & M of Pollution control system and compliance of consent conditions and EC conditions.

13. The applicant may apply consent to establish separately for additional activity like additional products handing, ship building and repairing etc.
14. The applicant shall comply with the conditions of the Environmental Clearance granted vide letter No. 11-55/2007-IA.III dated 25.10.2010 & 30/01/2019.
15. This consent is issued pursuant to the decision of the 10 th Consent Appraisal Committee Meeting held on 30.10.2024
16. The applicant shall make an application for renewal of consent 60 days prior to date of expiry of the consent.
17. The industry shall create an Environment Cell by appointing an Environmental Engineer / Expert for looking after day-to-day activities related to Environment / Pollution control.

This consent is issued on the basis of information/documents submitted by the Applicant/Project Proponent, if it has been observed that the information submitted by the Applicant/Project Proponent is false, misleading or fraudulent, the Board reserves its right to revoke the consent & further legal action will be initiated against the Applicant/Project Proponent.



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Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2024-12-03 18:10:16 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	2997281.00	MPCB-DR-29058	03/09/2024	RTGS
2	25000.00	TXN2411003611	27/11/2024	Online Payment

Copy to:

1. Regional Officer, MPCB, Kolhapur and Sub-Regional Officer, MPCB, Ratnagiri
- They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai
3. CAC desk - for record & website updation purpose

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

1. A] Generation - As per your application the treated effluent generation is Nil.
   B] Treatment - NA
   C] Disposal - NA

2. A] As per your application, you have provided Sewage Treatment Plant of designed capacity 16.5 CMD for the treatment of 8.0 CMD of sewage.

   B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards.

Sr.No	*Parameters*	*Standards (mg/l)*	
1	Suspended Solids	Not to exceed	50
2	BOD 3 days 27°C	Not to exceed	30
3	COD	Not to exceed	100

   C] The treated sewage shall be recycled for secondary purposes to the maximum extent and remaining shall be discharged on land for gardening within premise after confirming above standards. In no case, sewage shall find its way to outside factory premises.

3. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.

4. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	*Purpose for water consumed*	*Water consumption quantity (CMD)*
1.	Industrial Cooling, spraying in mine pits or boiler feed	50.00
2.	Domestic purpose	10.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Gardening	5.00

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have provided the Air pollution control (APC) system and erected following stack (s) to observe the following fuel pattern:

Stack No.	Source	APC System provided/proposed	Stack Height(in mtr)	Type of Fuel	Sulphur Content(in %)	Pollutant	Standard
S1	D.G Set-750 KVA	Acoustic Enclosure Stack	2.50	HSD 300 Kg/Hr	1.0	TPM	150 Mg/Nm^3
						SO2	144 Kg/Day

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C2R	Rs.25.0 Lakh	Within 15 days	Towards O & M of Pollution Control System and Compliance of Consent Conditions and EC Conditions	30/09/2027	30/09/2028

****Existing BG obtained for above purpose if any, may be extended for period of validity as above.**

If the above Bank Guarantee is not submitted within stipulated period, then 12% interest will be levied as a penalty as per circular dtd 29/02/2024 No. BO/MPCB/AS(T)/Circular/B-240229FTS0122

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
   a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
   b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   f) D.G. Set shall be operated only in case of power failure.
   g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding upon you.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.

12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
13. You shall operate OCEMS installed for source emission round 'O' clock and transmit data online to CPCB and MPCB server. You shall also monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in year and submit report to Sub Regional Officer.
14. You shall ensure collection, and segregation of BMW regularly to treat and dispose Off within 48 hrs from generation.
15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waste for any other purpose without obtaining prior written permission of the MPC Board.
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. You shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.

25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
26. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. You should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in every year and submit report to Sub Regional Officer.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
34. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
35. You shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
36. You shall create the Environmental Cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.

37. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 , Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year

38. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 , Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year

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This certificate is digitally & electronically signed.

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437
Fax: 24023516
Website: http://mpcb.gov.in
Email: cac-cell@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/L.S.I (R46)
No:- Format1.0/CAC/UAN No.0000231311/CE/2504003465

Date: 30/04/2025

To,
M/s. Angre Port Private Limited, Sr. No. - 39/1, 39/2, 39/3, 39/5, Village-Sande Lavgan,Post-Jaigad, Tal & Dist-Ratnagiri.

Your Service is Our Duty

Sub: Consent to Establish for Expansion.

Ref: Earlier Consent to Operate granted by Board Vide Format1.0/CAC/UAN No.MPCBCONSENT-0000219659/CR/2412000173 dtd. 03/12/2024.

Your application No.MPCB-CONSENT-0000231311 Dated 04.01.2025

For: Grant of Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 and Rule 18(7) of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

1. **The consent to establish is granted for a period up to commissioning of the unit or up to 5 year whichever is earlier.**
2. **The capital investment of the project is Rs.0.6 Crs. (As per undertaking submitted by pp Existing CI is-Rs. 499.54 Crs + Increase in C.I. - Rs. 0.60 Crs)**
3. **Consent is valid for handling of:**

Sr No	Product	Maximum Quantity	UOM
Products			
1	Agricultural Products - Food grains, Cereals, Pulses, Oilseeds Like - Maize, Rice, Seeds, Guar Gum, Millets, Coconuts etc. Fruits, Nuts, Vegetables, Edible Oil etc. Oil Cake, DE-oiled extractions, Cotton, Horticulture Products	500000	Ton/Y
2	Chemicals - Soda Ash, Phosphoric Acid, Liquid ammonia, Ethylene, Ethylene Di Chloride, Hydrogen, Ammonium Nitrate, Sodium Nitrate, Caustic Soda	750000	Ton/Y
3	Ores and minerals like -Iron ore, Bauxite,Laterite, Bentonite, Barite, Limestone, Dolomite, Lignite, Fluorspar, Quartz, Clay, Boron, Iron ore pellets, Cement, Clinker, Gypsum, Mill scale, Salt, Fly Ash, Silica Sand and other minerals	750000	Ton/Y

4	Fertilizer and Fertilizer raw material like - Di ammonium phosphate (DAP), Muriate of Potash (MOP), Rock Phosphate, Sulphur, Urea and other fertilizer	500000	Ton/Y

Sr No	Product	Maximum Quantity	UOM
5	Petroleum Products like crude oil, Diesel, Petrol, Motor Spirit, Kerosene (POL), HSD etc. LPG, LNG, Lubricant	1000000	Ltr/A
6	Wood, Wood Products, Timber, Bamboo, Stones,Marble and Granite	100000	Ton/Y
7	Pet Coke, Coke, Cooking Coal	1000000	Ton/Y
8	Plates, Billets, Project Cargo, Aluminum, Scrap	250000	Ton/Y
9	Livestock - Sheep's, Goats	20000	Nos./Y
10	Layup / repair / Maintenance of Offshore platform, Rigs, Ships, Barges	40	Nos./Y
11	Containers	50000	Nos./Y

4. **Conditions under Water (P&CP), 1974 Act for discharge of effluent:**

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	0.0	As per Schedule-I	Not Applicable
2.	Domestic effluent	0.0	As per Schedule-I	Not Applicable

5. **Conditions under Air (P& CP) Act, 1981 for air emissions:**

Sr No.	Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
NA				

6. **Non-Hazardous Wastes:**

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	NA	0	--NA--	0	0

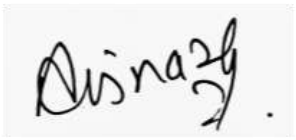
7. **Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:**

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
NA					

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
10. The industry shall obtain necessary permission from the Directorate of Industrial Safety and Health (DISH).
11. The applicant shall comply with CRZ Notification and EIA Notification, 2006 and subsequent amendments
12. The applicant shall comply with the conditions of the Environmental Clearance granted vide letter No. 11-55/2007-IA.III dated 25.10.2010 & 30/01/2019.

13. The applicant shall amend existing Environmental Clearance to incorporate proposed expansion activity before start of commissioning of activity.
14. This consent is issued pursuant to the decision of the 17th Consent Appraisal Committee Meeting held on 13.03.2025.
15. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/Activity.
16. The industry shall create an Environment Cell by appointing an Environmental Engineer OR Expert for looking after day-to-day activities related to Environment OR Pollution control.

This consent is issued on the basis of information/documents submitted by the Applicant/Project Proponent, if it has been observed that the information submitted by the Applicant/Project Proponent is false, misleading or fraudulent, the Board reserves its right to revoke the consent & further legal action will be initiated against the Applicant/Project Proponent.



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Signed by: Dr.Avinash Dhakne
Member Secretary
For and on behalf of,
Maharashtra Pollution Control Board
ms@mpcb.gov.in
2025-04-30 15:36:30 IST

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	6000.00	TXN2501000585	04/01/2025	Online Payment

Copy to:

1. Regional Officer, MPCB, Kolhapur and Sub-Regional Officer, MPCB, Ratnagiri
   - They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB,Sion, Mumbai

SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

Not Applicable

SCHEDULE-II

Terms & conditions for compliance of Air Pollution Control:

Not Applicable

SCHEDULE-III

Details of Bank Guarantees:

Sr. No.	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C2E	Rs.25 Lakhs	15 Days	towards compliance with consent conditions and conditions of Environmental Clearance.	Upto COU	31/03/2031

If the above Bank Guarantee is not submitted within stipulated period, then 12% interest will be levied as a penalty as per circular dtd 29/02/2024 No. BO/MPCB/AS(T)/Circular/B-240229FTS0122

BG Forfeiture History

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	Amount of BG Forfeiture	Reason of BG Forfeiture
NA						

BG Return details

Srno.	Consent (C2E/C2O/C2R)	BG imposed	Purpose of BG	Amount of BG Returned
NA				

SCHEDULE-IV

General Conditions:

1. The Energy source for lighting purpose shall preferably be LED based
2. The PP shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
3. Conditions for D.G. Set
   a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
   b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
   c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
   d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
   e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
   f) D.G. Set shall be operated only in case of power failure.
   g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
   h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
4. The applicant shall maintain good housekeeping.
5. The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
6. The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
7. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding upon you.
8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
11. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.

12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
13. You shall operate OCEMS installed for source emission round 'O' clock and transmit data online to CPCB and MPCB server. You shall also monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in year and submit report to Sub Regional Officer.
14. You shall ensure collection, and segregation of BMW regularly to treat and dispose Off within 48 hrs from generation.
15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
19. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waste for any other purpose without obtaining prior written permission of the MPC Board.
20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
22. The industry should not cause any nuisance in surrounding area.
23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
24. You shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.

25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
26. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto
27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
31. You should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in every year and submit report to Sub Regional Officer.
32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
34. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
35. You shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
36. You shall create the Environmental Cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.

37. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 , Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year

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This certificate is digitally & electronically signed.

Annexure – III

Shoreline Monitoring reports

NIO/SP-06/2026

(SSP3589)

Shoreline Monitoring Surrounding Angre Port in Maharashtra

Sponsored by: Angre Port Pvt Ltd.

FEBRUARY 2026

सीएसआईआर – राष्ट्रीय समुद्र वज्ञिान संस्थान
CSIR-NATIONAL INSTITUTE OF OCEANOGRAPHY
(वैज्ञानकि तथा औद्योगकि अनुसंधान परषिद)
(COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH)
दोना पावला, गोवा भारत / DONA PAULA, GOA - 403004 India
फ़ोन/Tel : 91(0)832-2450450/ 2450327
फैक्स /Fax: 91(0)832-2450602
इ-मेल/e-mail : ocean@nio.org
http:// www.nio.org

SUMMARY

This report presents the two-year study conducted by the CSIR-National Institute of Oceanography, Goa, at the request of Angre Port, pertaining to "Field Investigations Related to Shoreline Monitoring Surrounding Angre Port." The measured beach profiles and shoreline data are presented herein.

PROJECT TEAM

Gowthaman R.	Project leader
Gurudas M Tirodkar	Associate Project leader
Santana Caitan Vaz	
Sanil Kumar V V	
Kundan Katu Gaonkar	
Arya Pillai	

CONTENTS

LIST OF FIGURES

1. INTRODUCTION.

Angré Port is a state-of-the-art cargo terminal located on India's western coast, situated halfway between Mumbai and Goa, close to Ratnagiri. Established in 2013 and owned by the Chowgule Group, Angré Port Private Limited is located in Jaigad, Maharashtra. The port's facilities include extensive storage areas and modern cargo equipment, contributing to its efficiency and reliability. Angré Port is currently undertaking expansion initiatives to boost its capacity and capabilities. These developments include building extra berths, upgrading storage facilities, and improving infrastructure for connectivity. Angré Port is positioned to further establish itself as a crucial maritime hub on India's western coast, promoting economic growth and facilitating both domestic and international trade as these projects come fruition.

The shoreline is a fascinating and dynamic area; it is the ever-changing boundary where land meets water. This border is constantly shaped by tides, waves, and weather, resulting in a wide range of landscapes. The earth is worn away by waves and currents, creating cliffs and leaving behind sand and pebbles that become beaches. Sand pushed by the wind can form dunes, which over time can change and reshape the coastline. Meanwhile, the intertidal zone—a special environment where marine and terrestrial species coexist—is revealed by the rising and falling tides. Not only are shorelines stunning, but they also serve as essential ecosystems that sustain human activities like fishing and recreation, shield the land from erosion, and serve as habitats for a variety of species. Understanding shorelines enables us to respect their strength, enjoy their beauty, and manage them for the benefit of people and environment.

2. SCOPE OF STUDY

1. Beach profile measurements at Tavasal and Rohile beaches at three monthly interval over two year period
2. Shoreline data collected through GPS at three monthly interval over two year period
3. Satellite data analysis and mapping the shorelines

2 . STUDY AREA

The proposed site is located within the existing Angre Port at Village Sande-Lavgan in the Ratnagiri district of Maharashtra. It is approximately 44 km from the town of Ratnagiri. The nearby beach is situated in the Tavasal and Rohile villages within Guhagar taluka. This area features a long beach and a forest of Casuarina Equisetifolia, commonly known as Horse Tail Trees. Guhagar taluka, where the village is located, offers a ferry boat service for sea transport, connecting Jaigad to Guhagar.

Rohile Beach is renowned for its pristine natural beauty, featuring unspoiled golden sands and crystal-clear waters. This tranquil beach is enveloped by lush greenery, creating a serene environment perfect for relaxation and escape from urban chaos. Its seclusion offers a more private and peaceful experience, ideal for those seeking solitude and a close connection with nature.

Similarly, Tavasal is renowned for its "Ironwood trees" or "Australian pines," which provide cool shade and enhance the area's scenic beauty. Both beaches serve as exemplary locations for those wishing to experience the pristine coastal allure of Maharashtra, with easy access from nearby towns and cities.

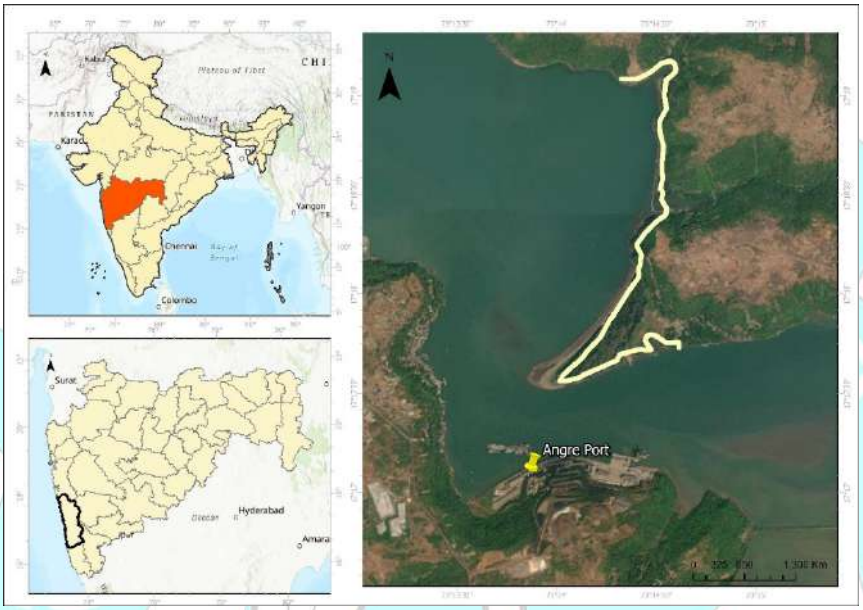
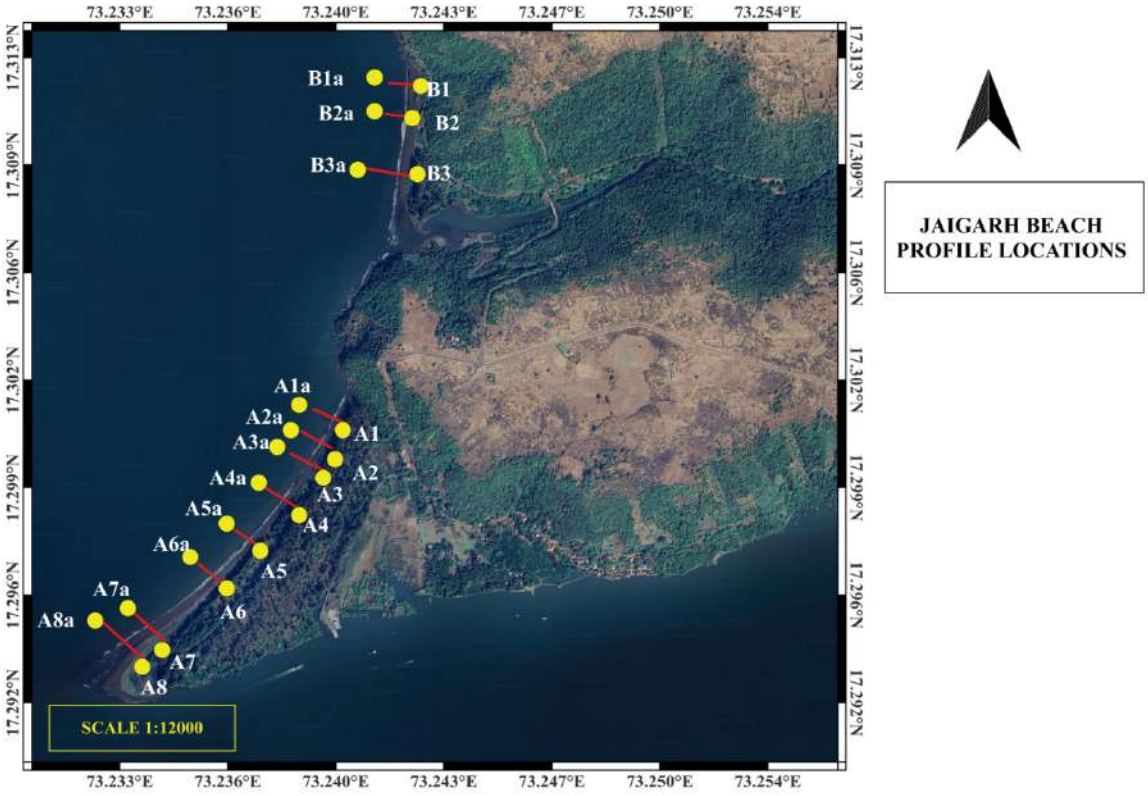


Fig 1. Study Area



2. Beach profile location

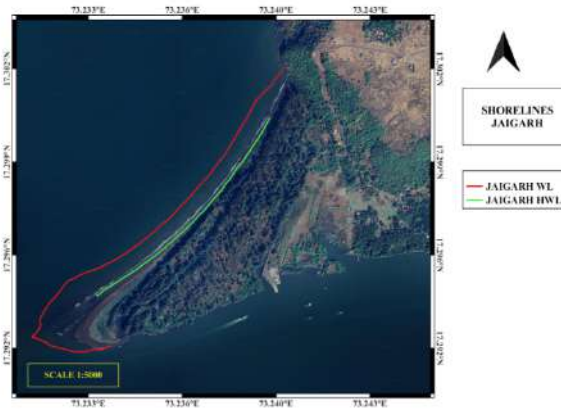


Fig.3 Shoreline in Tavasal beach

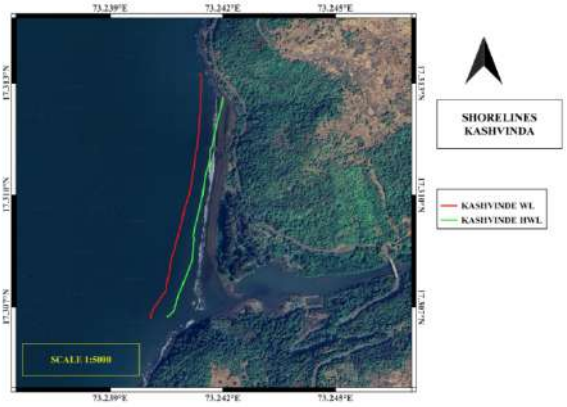


Fig. 4 Shoreline in Rohile beach

4. MEHODOLGY

The Intertidal zone of the selected beaches were measured using Dumpy level. The dumpy level is an optical surveying leveling instrument consisting of a telescope tube firmly secured in two collars fixed by adjusting screws to the stage by the vertical spindle. The dumpy level is mounted on a tripod stand. Initial setups were carried before taking profiling. Profiles were taken from the benchmark, a point on the beach that remains stable and permanent to the sea. Measurements of beach profiles from the temporary benchmark till the water line are taken at 5 mt intervals along stretches of uniform slope and at 1m or less where abnormal slope changes occur, like beach berms, ridge-runnels, etc. Profiles are taken from Temporary benchmark(TBM), a point on the beach that remian stable, to the sea. The profile are taken at three month intervals at the selected location from the fixed Benchmark to the low water line. The TBM for beach profile have been set during first field visits in the month February 2024. Eight TBM fixed in Tavasal beach and three TBM fixed in Rohile beach.

Dumpy Level

GPS

A field shoreline methodology employing ground surveys entails the direct, in-situ measurement of shoreline positions for mapping purposes. The most precise method utilises GPS to delineate the shoreline, typically defined by the high-water line or wet/dry line, under specific tidal conditions.

Satellite Image

Landsat-7 in 2013 and Landsat-8 in 2024 & 2025 satellite data are highly valuable for shoreline studies. These satellites capture images of the Earth at various light wavelengths, aiding in the identification of land, sea, and coastal vegetation. With a long operational history and regular revisit cycles every 16 days, they provide a wealth of data to shoreline changes over periods ranging from days to decades. Monitoring data were transferred to ArcGIS for further processing, where they were converted from raster to vector format using a conversion tool for more detailed spatial analysis. Subsequently, coastlines from different periods were integrated into a single dataset. Monitoring data were transferred to ArcGIS for further processing, where they were converted from raster to vector format using a conversion tool, more detailed spatial analysis Subsequently, coastlines from different periods were merged into a single dataset.

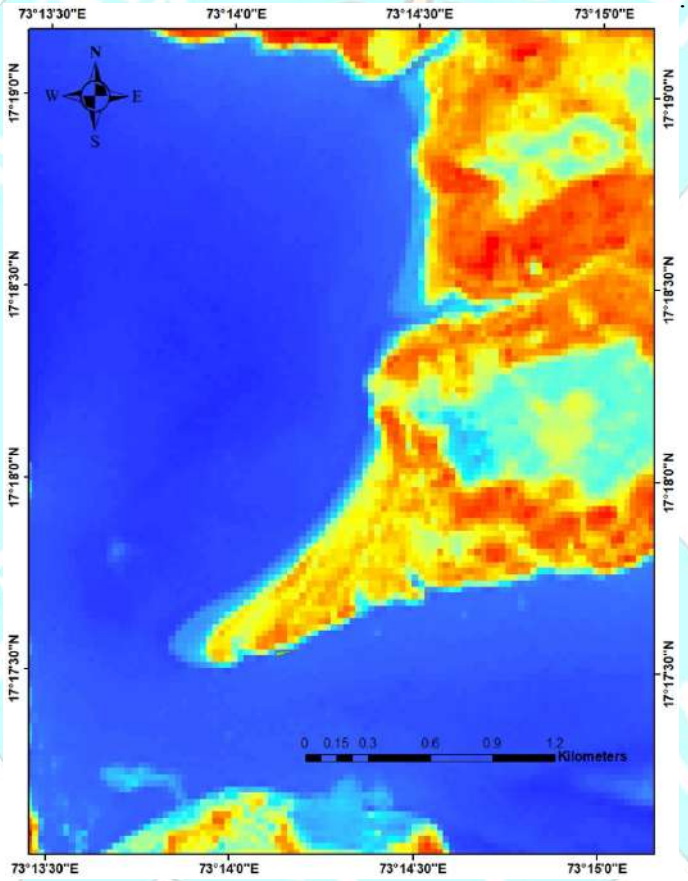


Fig. 5 Satellite Image

5. RESULTS

5.1 Beach profile

The beach profiles were measured at three-month intervals over a two-year period along the study area, as presented in the figure no. 6 to 16. Beach profiles were measured at 11 Temporary benchmarks (TBM) in the study area from February 2024 to November 2025. Monitoring of the beach profiles provides data on volumetric changes in the coastline under study, while satellite-based shoreline difference analyses reveal planar (spatial) changes in the shoreline. For coasts with a fixed shoreline,

Table 1. Detail of Temporary Beachmarks(TBM)

Sr. No	Station	Latitude (°N)	Longitude (°E)	Location
1	A1	17 18 04.68	73 24 23.16	Tavasal beach
2	A2	17 18 01.10	73 14 21.60	Tavasal beach
3	A3	17 17 58.50	73 14 20.60	Tavasal beach
4	A4	17 17 54.20	73 14 17.40	Tavasal beach
5	A5	17 17 49.40	73 14 13.40	Tavasal beach
6	A6	17 17 45.00	73 10 01.20	Tavasal beach
7	A7	17 17 38.49	73 14 02.19	Tavasal beach
8	A8	17 17 36.18	73 13 59.80	Tavasal beach
9	B1	17 18 43 .52	73 14 32.69	Rohile beach
10	B2	17 18 39.77	73 14 32.04	Rohile beach
11	B3	17 18 32.84	73 14 31.32	Rohile beach

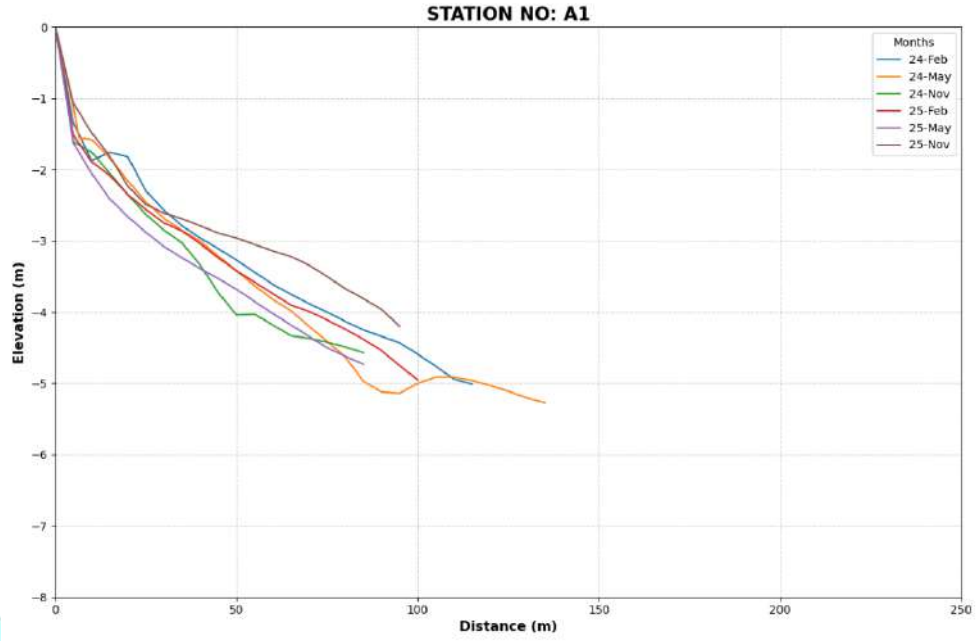


Fig. 6. Beach profile at Tavasal Station A1

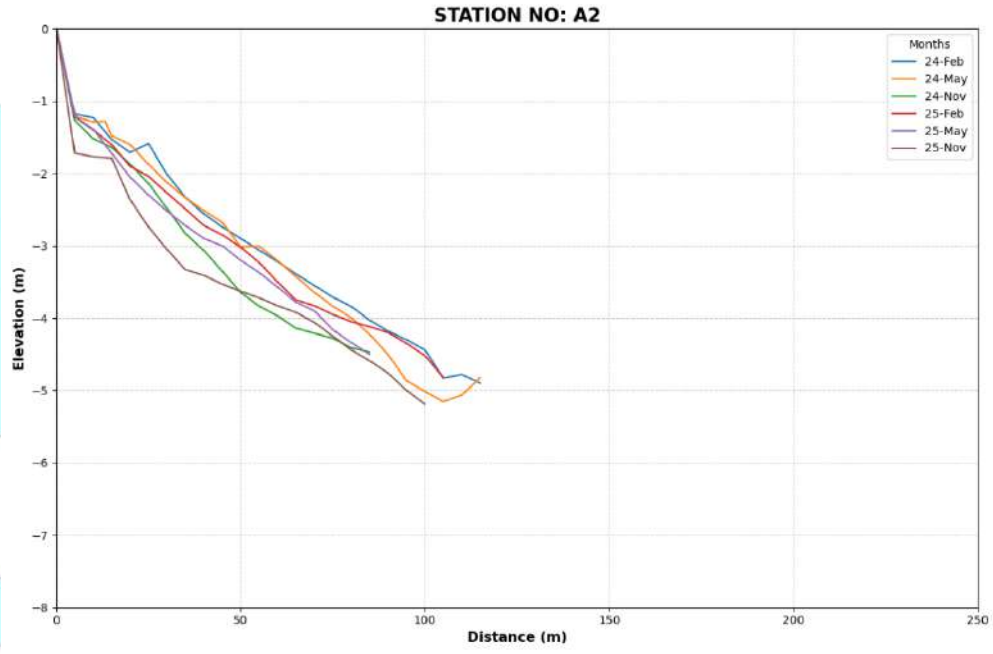


Fig. 7. Beach profile at Travsal Station A2

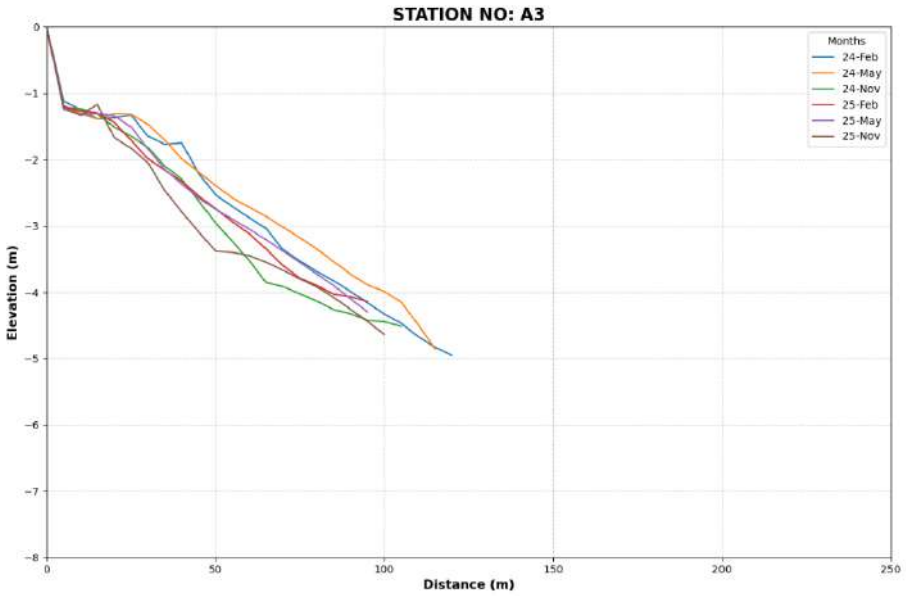


Fig.8. Beach profile at Travsal Station A3

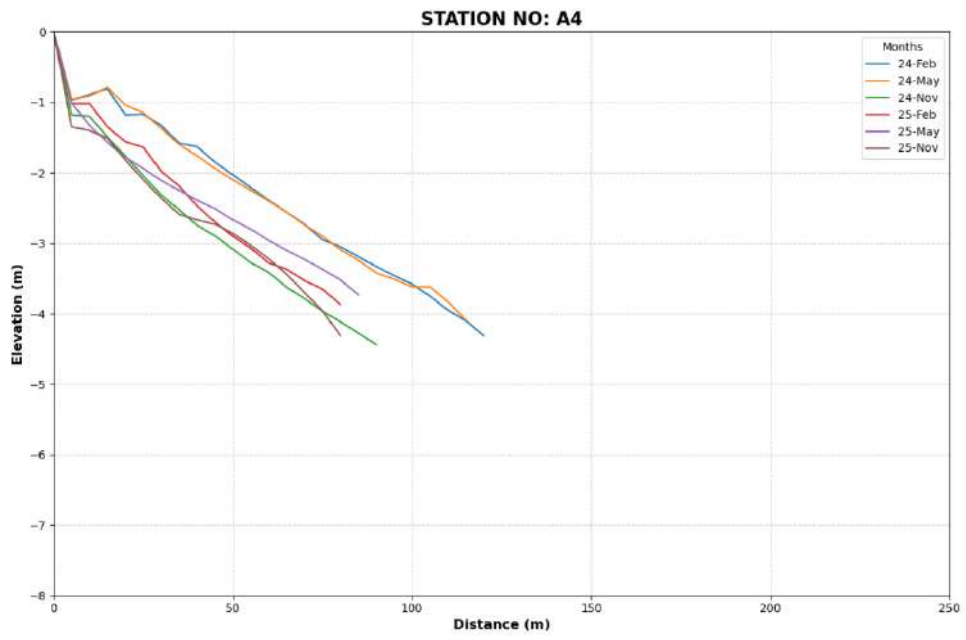


Fig.9. Beach beach profile at Travsal Station A4

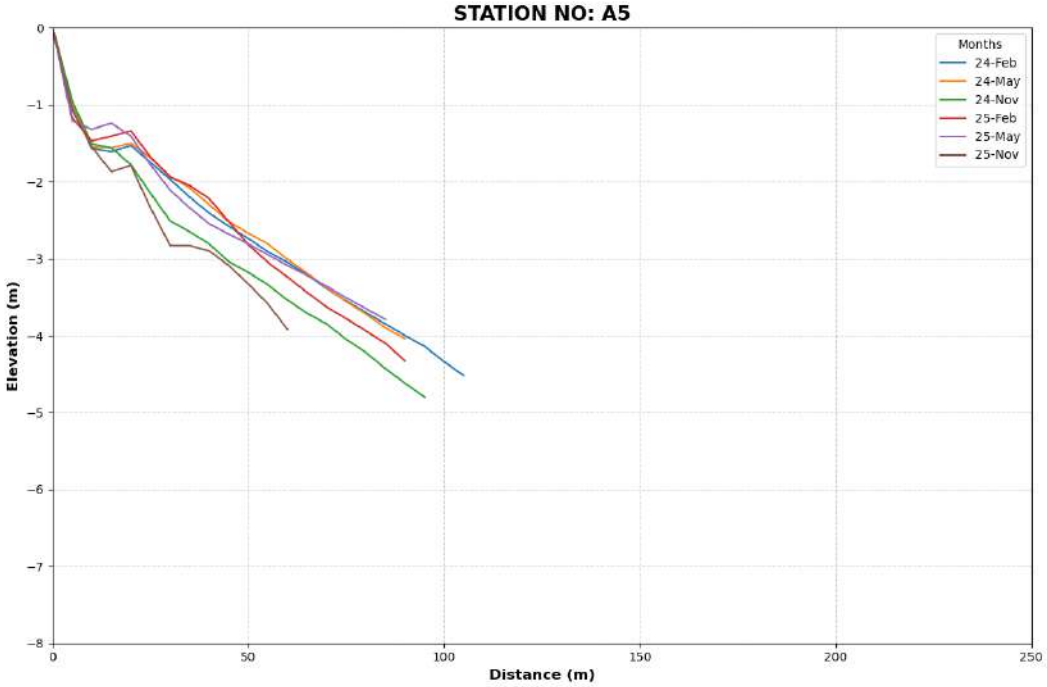


Fig.10. Beach profile at Travsal Station A5

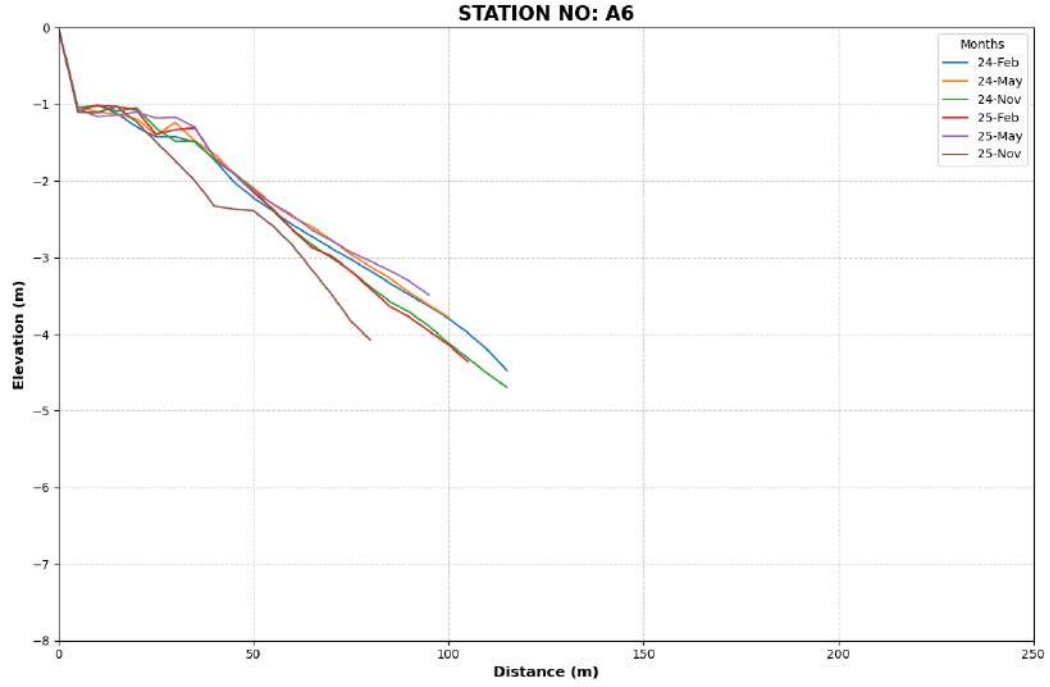


Fig.11. Beach profile at Travsal Station A6

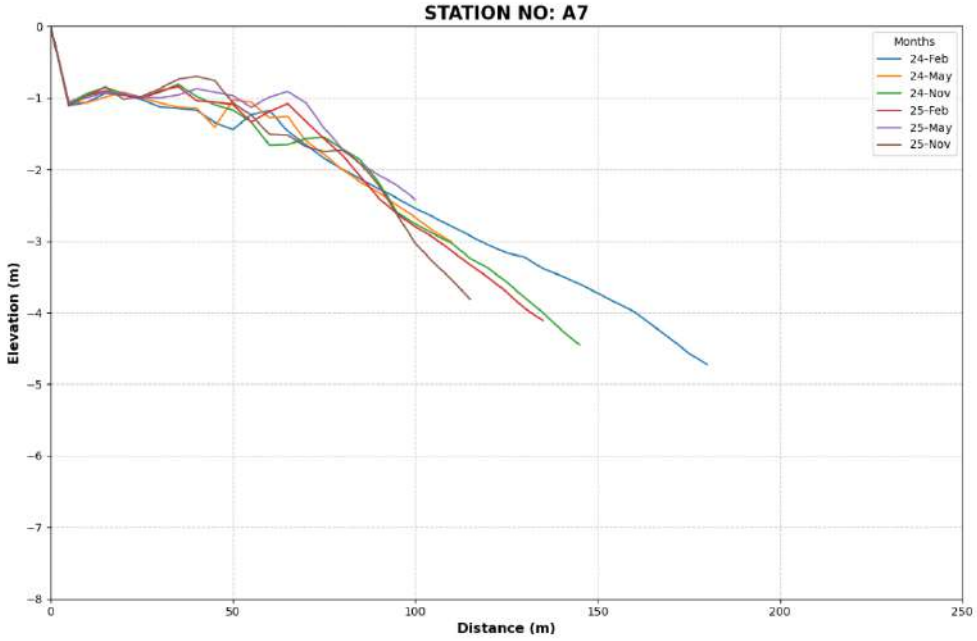


Fig.12. Beach profile at Travsal Station A7

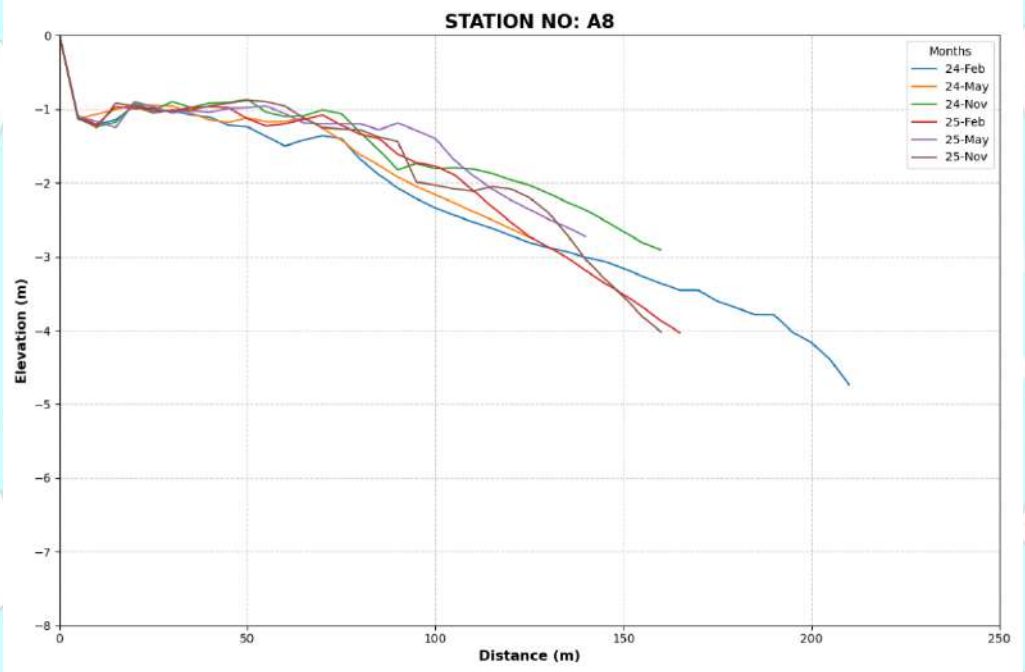


Fig.13. Beach profile at Travsal Station A8

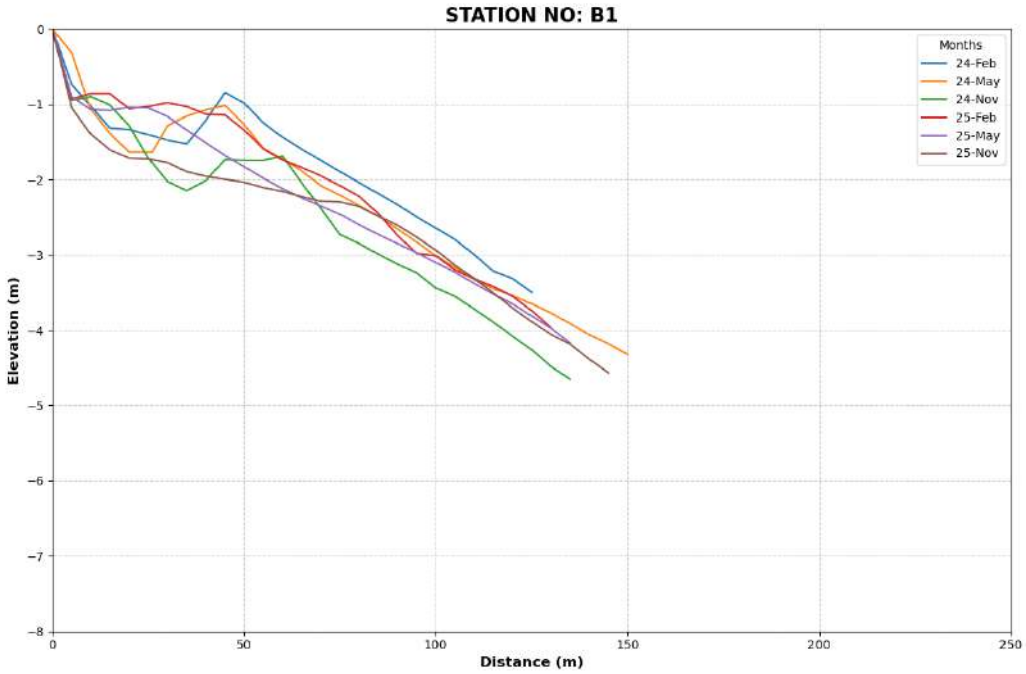


Fig.14. Beach profile at Rohile Station B1

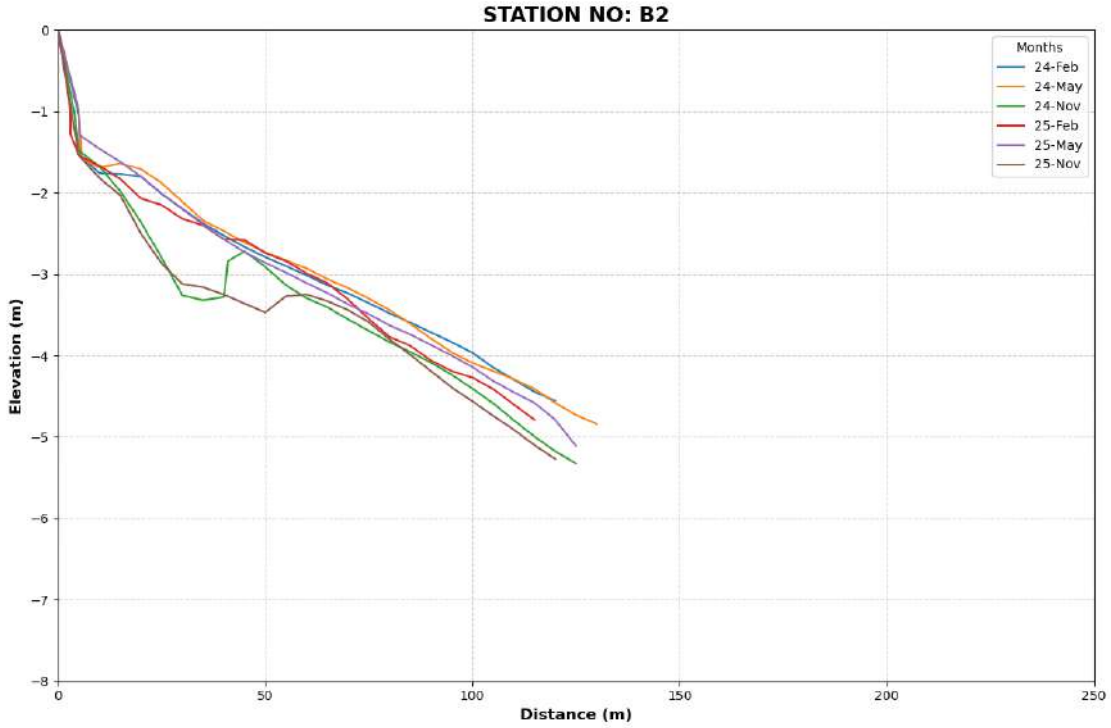


Fig.15. Beach profile at Rohile Station B2

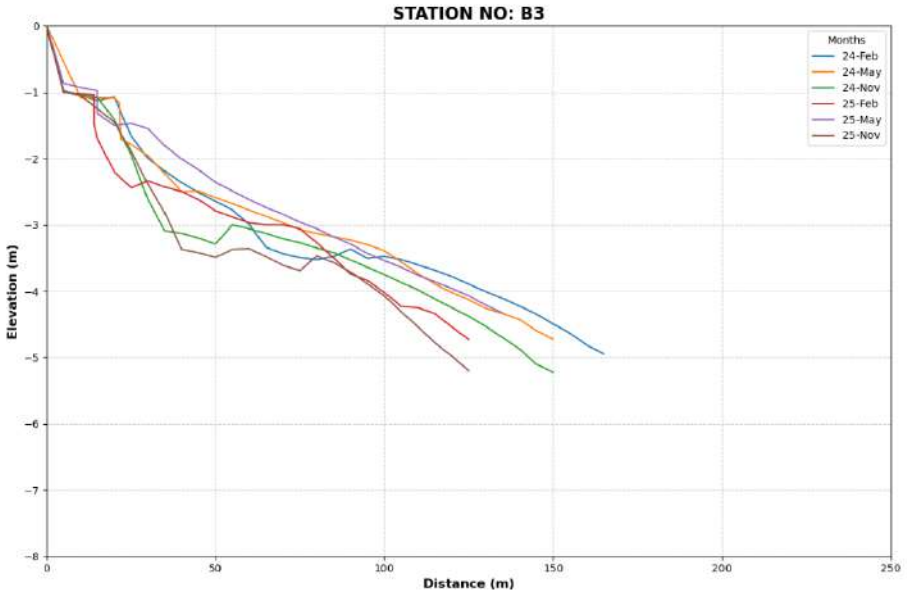


Fig.16. Beach profile at Rohile Station B3

5.2 Beach Volume

Beach volume typically reflects the physical characteristics of the shoreline, which are influenced by seasonal erosion or accretion. During the monsoon season, substantial erosion occurs as large, powerful waves remove significant portions of the shore, whereas the reverse process takes place during the pre-monsoon and post-monsoon periods. Beach volumes are depicted, as shown below, through beach profile surveys that offer a cross-sectional view of the shoreline. Both accretion and erosion occur during this time, with the key measure being the difference between the highest accretion value and the lowest erosion value.

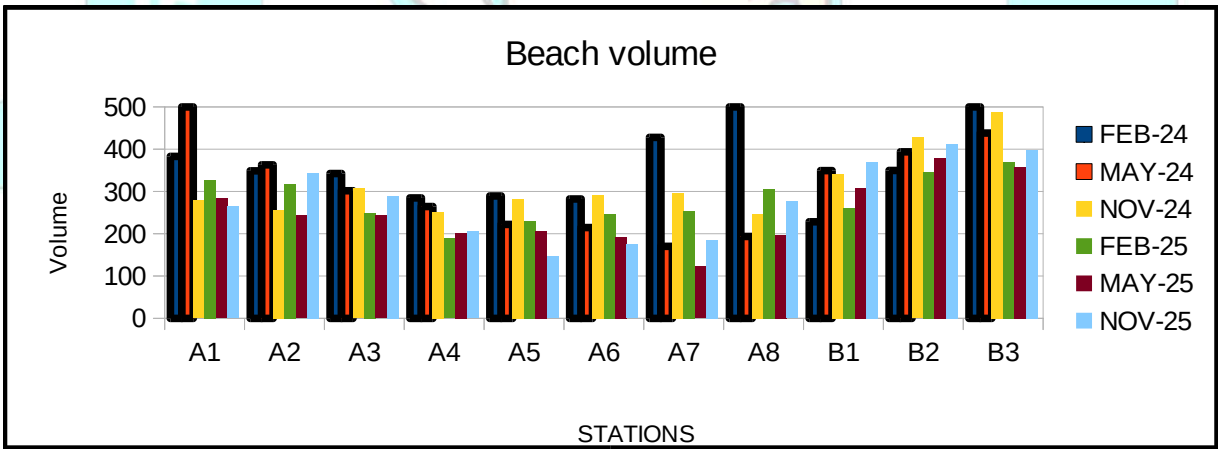


Fig.17. Beach volume

In comparison to Tavasal Beach, Rohile Beach's beach profiles begin at a higher elevation and have a more noticeable slope. This implies that the two beaches' geological and sedimentary features differ from one another. As is typical of natural beach profiles, both beaches show a general drop in height towards the water.

5.3. Shoreline

Shoreline surveys were conducted at three-month intervals over a two-year period. Data collected between February 2024 and November 2025 were obtained by traversing the waterline with a handheld GPS during each survey. Figures 18 and 19 present maps depicting the waterline at both low and high tides, generated from the collected GPS data This detailed representation facilitates precise analysis of tidal variations and shoreline dynamics.

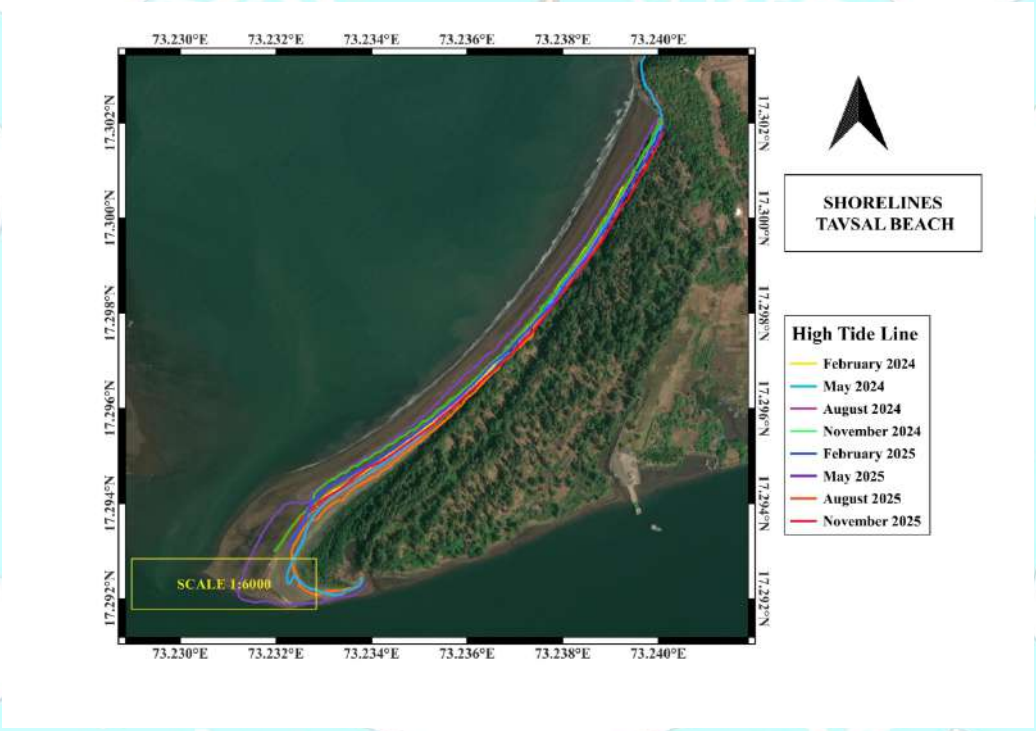


Fig. 18. Shoreline field data from Tavasal beach

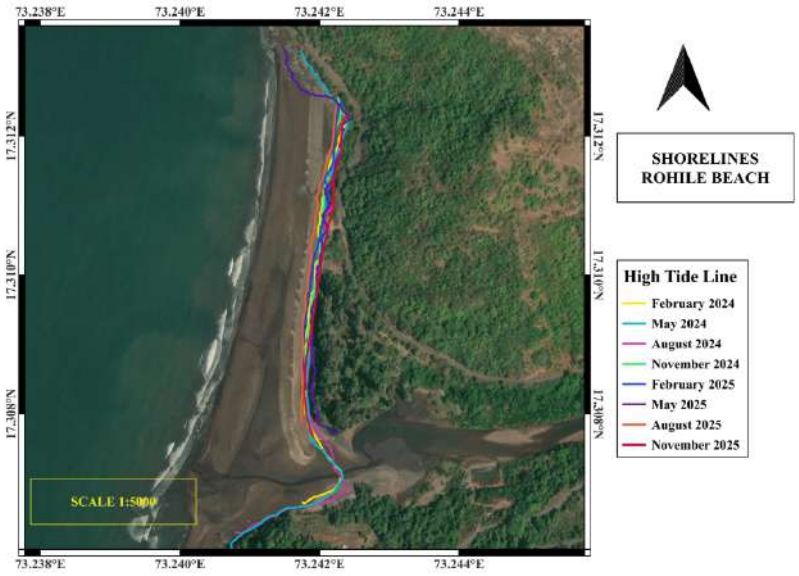


Fig. 19. Shoreline field data from Rohile beach

5.4 Satellite

Satellite imagery from 2013 to 2025 was analysed. The basemap and shoreline locations for this period are displayed on the provided map. This visual representation enables a comprehensive examination of coastal changes over the 12-year span. To enhance the accuracy of the analysis and identify areas affected by shoreline shifts, a baseline with a buffer encompassing all combined coastline positions has been established. Accretion at the river mouth accretion exceeded expected levels

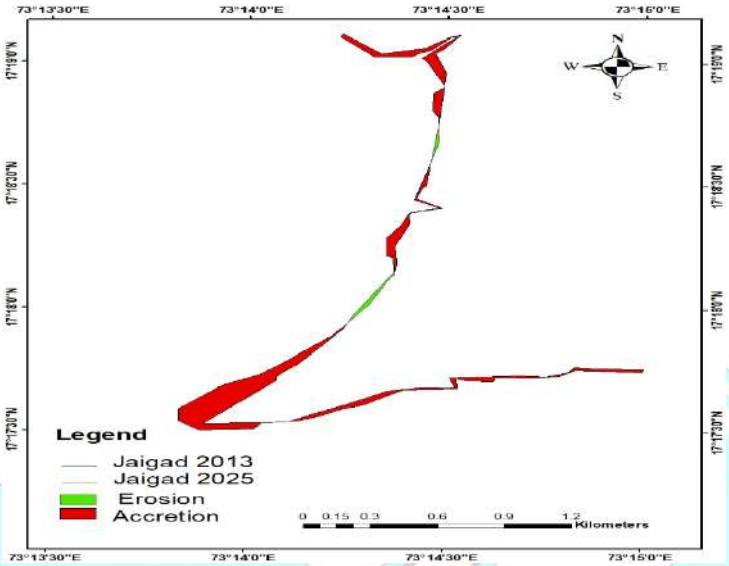


Fig. 20. Shoreline changes from 2013-2025

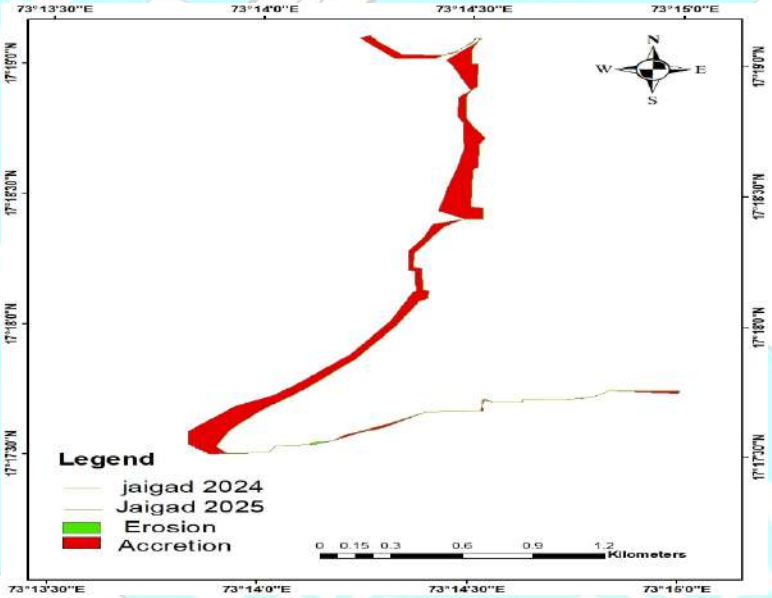


Fig.21. Shoreline changes from 2024-2025

6. CONCLUSION

In the study area, shoreline dynamics indicated the highest accretion at Stations A7 and A8, while the most significant erosion was observed at Stations A4 and A5 along Tavasal Beach. Rohile Beach is situated at a higher elevation and exhibits a more pronounced slope. The geological and sedimentary characteristics of the two beaches differ one another. As is typical of natural beach profiles, both beaches display a general decline in elevation towards the water. The shoreline survey provides a comprehensive representation that facilitates precise analysis of tidal fluctuations and coastal dynamics. Satellite imagery provided a comprehensive examination of coastal changes over a 12-year period. To accurately identify areas affected by shoreline shifts, a baseline with a buffer encompassing all combined coastline positions was established. Accretion at the river mouth surpassed expected levels.

Angre port oppsite at Tavasal beach

Beach profile using Dumpy level at Rohile beach

Shoreline data collected with GPS

Annexure – IV

Public Hearing minutes

मे. जयगड पोर्ट इंन्फ्रास्ट्रक्चर प्रा. लि. यांच्या बंदर प्रकल्पाची पर्यावरण विषयक जनसुनावणीचे इतिवृत्त

मे. जयगड पोर्ट इंन्फ्रास्ट्रक्चर प्रा. लि., यांच्या सांडेलावगण, ता. जि. रत्नागिरी येथील प्रस्तावीत बंदर प्रकल्पाची पर्यावरण विषयक जनसुनावणी, प्राथमिक शाळा, सांडेलावगण जवळील मैदानात दिनांक १४.७.२००९ रोजी सकाळी ११.०० वाजता घेण्यात आली सदर सुनावणी करीता खालील सदस्य उपस्थित होते.

१. श्री. मधुकर गायकवाड :- जिल्हाधिकारी, रत्नागिरी व अध्यक्ष.
२. श्री. नितीन शिंदे :- प्रादेशिक अधिकारी, महाराष्ट्र प्रदूषण नियंत्रण मंडळ, कोल्हापूर यांचे प्रतिनिधी.
३. श्री. नरसिंह शिवांगी :- उप प्रादेशिक अधिकारी, महाराष्ट्र प्रदूषण नियंत्रण. मंडळ, रत्नागिरी तथा जनसुनावणी संयोजक.

सुरवातीला जनसुनावणीचे अध्यक्ष तथा जिल्हाधिकारी, रत्नागिरी यांनी सर्व उपस्थितांचे स्वागत केले व उपस्थितांना सांगीतले की केंद्रीय पर्यावरण व वने मंत्रालय, नवी दिल्ली यांच्या अधिसूचनेनुसार ही जनसुनावणी आयोजित करण्यात आलेली आहे. प्रकल्पाचे सल्लागार प्रकल्पाबाबत माहिती देतील त्यानंतर उपस्थितांनी शंका व प्रश्न विचारावेत त्यानंतर त्यांनी संयोजकांना जनसुनावणीचे कामकाज सुरु करण्यास सांगितले.

श्री. न. ह. शिवांगी, उपप्रादेशिक अधिकारी, मप्रनि मंडळ, रत्नागिरी तथा जनसुनावणीचे संयोजक यांनी देखील सर्व उपस्थितांचे स्वागत केले व सांगीतले की पर्यावरण व वने मंत्रालय, नवी दिल्ली यांच्या १४ सप्टेंबर, २००६ च्या अधिसूचने मधील तरतूदीनुसार ही जनसुनावणी घेण्यात येत आहे. या जनसुनावणीचा हेतू लोकांचे प्रकल्पाबाबतचे मत तसेच आक्षेप असल्यास ते विचारात घेणे असून उपस्थितांनी लेखी किंवा तोंडी स्वरुपात आपले मत व्यक्त करावे. जनसुनावणीचे इतिवृत्त प्राप्त झालेली लेखी निवेदने तसेच व्हीडीओ सीडी मप्रनि मंडळाच्या मुख्यालयामार्फत पर्यावरण व वने मंत्रालयास सादर करण्यात येतील. सुरुवातीस प्रकल्पाचे सल्लागार प्रकल्पाबद्दल माहिती देतील यानंर उपस्थित सर्वांनी सहभागी होवून त्यांच्या शंका व प्रश्न विचारावेत.

मा. अध्यक्षांच्या परवानगीने प्रकल्पाचे सल्लागार डॉ. उमेश कुलकर्णी यांनी प्रकल्पाबाबतची माहिती प्रोजेक्टरच्या सहा याने उपस्थितांना दिली.

त्यांनी प्रकल्पाचे ठिकाण नकाशाच्या सहा याने दाखविले राज्य सरकारच्या बांधा, वापरा आणि हस्तांतरीत करा योजनेनुसार घोषीत सात ठिकाणांमधील जयगड हे एक ठिकाण आहे. सदर बंदरापासून राष्ट्रीय महामार्गा पर्यंतच्या रस्त्याचे चौपदरीकरण व रेल्वे लिंक योजना आखण्यात आली आहे. प्रकल्पाची किंमत सुमारे २९२ कोटी इतकी आहे.

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प्रकल्पाचे सल्लागाराने प्रकल्पाबाबत माहिती दिल्यानंतर मा. अध्यक्षांनी उपस्थितांना त्यांच्या शंका व प्रश्न विचारण्यास सांगीतले. उपस्थितांनी विचारलेले प्रश्न व प्रकल्पसल्लागाराने दिलेली उत्तरे याबाबतची माहिती पुढील प्रमाणे :-

१. श्री. शरद बळीराम बोरकर, जिल्हा परिषद सदस्य :- प्रकल्पासाठी शेतक-याकडून कंपनीने १७-१८ वर्षापूर्वी जमीन विकत घेतली आहे. यापैकी नेमकी कुठली जमीन वापरणार आहात?

कंपनी जहाज दुरुस्ती प्रकल्प व माल वाहतूक प्रकल्प उभारणार आहे परंतु येथे फक्त माल वाहतूक प्रकल्पाची जनसुनावणी घेण्यात येत आहे. प्रकल्पाबाबतचा अभ्यास प्रकल्पाच्या नियोजीत ठिकाणाचा केला आहे की अन्य ठिकाणाचा कारण अहवालातील १७.०७ रेखांश हे आरे वारे ठिकाणाचे आहेत. समरी मध्ये ड्रायडॉक जेटी उजव्या बाजूला आहे यापैकी डाव्या बाजूचीच माहिती मिळाली. पहिल्या जेटीचे दूस-या जेटी पर्यंतचे अंतर नमुद केलेले नाही. आमचा प्रकल्पाला विरोध नाही. प्रकल्पाचे आम्ही स्वागत करतो पण चुकीची माहिती आम्ही नाकारणारं.

प्रकल्पाचे सल्लागार :- प्रकल्पाला परवानगी २००० साली मिळाली. प्रकल्प ठिकाणचे रेखांशबाबत अहवालात टायपिंग चूक झाली आहे ती आम्ही दुरुस्त करु जहाज दुरुस्ती प्रकल्पाकरिता जनसुनावणी घेण्याची आवश्यकता नाही.

२. श्री. प्रभाकर शिंदे, सांडे लावगण :- इंग्रजी अहवाल मराठीत तंतोतंत केला आहे का? इंग्रजी अहवालात रत्नागिरी नंतर जयगड दाखवले आहे. मराठी अहवालात नकाशाच नाही. प्रकल्पाचा अभ्यास कच्चा व त्रोटक केलेला आहे. प्रकल्प क्षेत्रात चार ग्रामपंचायती येतात तथापी अहवाल मात्र कासारी ग्रामपंचायतीलाच दिलेला आहे. नांदिवडे, चाफेरी ग्रामपंचायतींना अहवालच दिलेला नाही. अहवालात एकूण १० प्रकरणे आहेत. प्रकल्पाला आम्ही जमीनी दिलेल्या आहेत. कोकणचा कॅलिफोर्निया व्हावा हे आमचे स्वप्न आहे. प्रकल्पाबाबत आमच्या हरकती आहेत. लोकांनी प्रकल्पासाठी २४३ एकर जमीन दिली आहे. मराठी अहवालात बारदान प्रकल्प म्हटले आहे. बारदान प्रकल्प म्हणजे काय? प्रकल्पाच्या मराठीतील अहवालात इंग्रजी शब्द आहेत. प्रकल्पाच्या सल्लागाराने प्रकल्पाबाबतची माहिती फक्त २० मिनीटात सांगीतली याबाबत कंपनी अधिका-यांनी लेखी करारपत्र इथेच मान्य करावे. ग्रामस्थांना विश्वासात घेवून गोष्ट करावी. प्रकल्पाचा सत्य अहवाल व स्पष्ट आराखडा असला पाहिजे. सुनावणी ग्रामस्थांच्या सोईनुसार व्हावी. ज्यावर परिणाम होणार आहे ते स्पष्ट केलेले नाही. प्रकल्पाच्या अभ्यासासाठी सुनावणी ३ महिन्यांसाठी स्थगीत करावी. प्रकल्पाला १७ वर्षांपूर्वी शेतक-यांनी जमीनी दिल्या गावातील त्यावेळी लहान असणारी मुले आता ३४ वर्षांची झाली आहेत पण अजून बेकार आहेत. याबाबत कंपनीची काही जबाबदारी नाही का? कंपनीच्या कार्यकारी अधिका-यांनी लेखी स्पष्टीकरण देण्यापूर्वी सुनावणी घेवू नये.

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यानंतर त्यांनी जयगड बंदराची वैशिष्टये सांगीतली. येथे गाळाची मात्रा कमी असून पश्चिम महाराष्ट्रात आयात क्षेत्रात औद्योगिकी करणाचा वाढता कल असल्याचे ते म्हणाले कंपनीकडून गेल्या पाच वर्षात बॉक्साईटची यशस्वीपणे निर्यात केली आहे. मालाच्या जलद गतीने हाताळणीसाठी प्रस्तावीत धक्क्याची लांबी ४५० मिटर रुंदी २७ मीटर असून प्रस्तावीत कमीत कमी ३ जोडमार्ग असतील. कंटेनर मध्ये टेक्सटाईल व फुले हा माल मुख्यत्वे असेल. प्रदूषण करणा-या मालाची हाताळणी करण्यात येणार नाही.

प्रकल्पासाठी पुरेशी जमीन कंपनीच्या ताब्यात आहे. या प्रकल्पाकरीता NIOT व CWPRS या सरकारमान्य संस्थांकडून योग्य तो अभ्यास व मार्गदर्शन घेतले आहे. NIOT संस्थेने प्रवाहाच्या लाटांचा तसेच भरती ओहोटीचा अभ्यास केला आहे. CWPRS कडून भरती ओहोटीचा तसेच गाळ निर्मितीबाबतचा अभ्यास अहवाल मिळविण्यात आलेला आहे. HPTI, जर्मनी यांनी जहाजाच्या येण्याजाण्याचा मार्ग व त्यासंबंधीची योजना तयार केली आहे. जमीनी वरील तसेच पाण्यातील मृदेची तपासणी करण्यात आली आहे. महाराष्ट्र कोस्टल झोन मॅनेजमेंट ॲथॉरीटी (MCZMA) यांनी २६ सप्टेंबर २००८ ला प्रकल्पाला मंजुरी दिली आहे. भरती ओहोटीच्या सीमांचे परिक्षण NIOT संस्थेने केले आहे.

प्रकल्पासाठी योग्य खोलीचे चॅनल व बर्थ पॅकेट मध्ये ड्रेजिंग करण्यात येईल. एकून २.५ दशलक्ष घनमिटर ड्रेजिंग आवश्यक आहे. ड्रेजिंग मधून निर्माण झालेला गाळ भराव करण्यासाठी वापरण्यात येईल. या भरावामुळे भुंखंडाच्या तसेच पाण्याच्या दर्जात काही बदल होणार नाही. प्रकल्पाच्या ठिकाणी खारफुटी व इतर झाड-झुडपे नाहीत. देशाच्या आयात-निर्यातीमधील वाढीमुळे अधिक क्षमतेची बंदरे आवश्यक असल्याचे त्यांनी सांगीतले.

प्रकल्पाचे इतर मुख्य घटक जसे आग प्रतिबंधक उपकरणे, वीज पुरवठा, पाणी पुरवठा व सांडपाण्याची व्यवस्था यांचेसाठी योग्य तरतूद केली आहे. प्रकल्प परिसरात एकूण ५ ठिकाणी पर्यावरण निरिक्षण केंद्रे उभारुन तपासणी केली असल्याची ते म्हणाले. याठिकाणी वातावरणातील हवेचा दर्जा व ध्वनी पातळी मापन केले आहे. कंपनीकडून पर्यावरण व्यवस्थापन नियंत्रक योजना पारित करण्यात आलेल्या आहेत यामध्ये बांधकाम टप्पा व प्रकल्प संचलन टप्प्यात पर्यावरणावर होणारे संभाव्य परिणाम लक्षात घेवून त्यावर योग्य त्या उपाययोजना अंमलात आणलेल्या आहेत. प्रकल्पदाराने आपत्-कालीन व्यस्थापन योजना व पर्यावरण व्यवस्थापन योजना तयार केलेली आहे.

प्रस्तावीत प्रकल्पामुळे मुंबई बंदराच्या अवतीभोवतीच्या वाहतूक कोंडी मध्ये घट होईल, ध्वनी व हवा प्रदूषण कमी होण्यास मदत होईल. प्रकल्पाच्या संचलन टप्प्यामध्ये पर्यावरणावर कोणताही अनिष्ट परिणाम होणार नाही याची कंपनी कडून दक्षता घेण्यात येईल.

आम्ही Dry Dock व जात प्रकल्पासाठीच जमीनी दिल्या आहेत आमच्या कडे करारनामा आहे असे असतांना बारदान हाताळणी प्रकल्पाची सुनावणी घेत आहात उद्योग मंत्रालयाचे ३१.५.१९९३ चे पत्रानुसार शासनाने Dry Docking व ship repair प्रकल्पासाठी परवानगी दिली आहे. बारदान प्रकल्पासाठी नव्हे प्रकल्पाच्या ठिकाणी स्मशानभूमी आहे पण अहवालात संवेदनशील भाग नाही असे म्हटले आहे.

जिल्हाधिकारी, रत्नागिरी यांचे दिनांक ३०.६.२००४ चे आदेशानुसार कंपनी जहाज दुरुस्तीसाठी जमीन खरेदी करणार आहे. पण येथे बारदान प्रकल्पाची सुनावणी चालू आहे.

एखादया कारणासाठी संपादित केलेली जमीन विशिष्ट कालावधीत उपयोगात आणले नाही तर ती परत करण्याची तरतूद आहे, याबाबत स्पष्टीकरण दयावे. अहवालातील क्षेत्रापैकी काही जागेची खरेदी अजून व्हायची आहे वरील कारणांसाठी सुनावणी पुढे ढकलावी.

यावर मा. अध्यक्षांनी उपस्थितांना सांगितले की ही पर्यावरण विषयक जनसुनावणी असल्याने आपण प्रदूषण विषयक प्रश्न विचारावेत.

३. प्रभाकर शिंदे :- EIA अहवालातील प्रकरण १.२ - प्रदूषणाची रुपरेषा सर्व सामान्यांना समजणारी नाही. पूर्वीची जागा व नवीन जागा यात बदल केल्याचा परवाना नाही. केंद्र शासनाचा नवीन जागेसाठीचा परवाना जाहिर करा. अहवालातील जागेचे अक्षांश रेखांश हे दुस-याच ठिकाणचे आहेत. आम्हाला अहवाल समजण्यासाठी कंपनी खर्चाने तंत्रज्ञ मिळावा.

प्रकरण २.२ - सुमारे २.५ million m^3 ड्रेझींग केल्यामुळे जमीनीची धुप होणार वाढणा-या खोलीमुळे साखरमोहल्ला भागामध्ये दूष्परिणा होईल.

प्रकरण २.९ - प्रकल्पाचे जागेत खांजण व खारफुटी नाहीत हे दिशाभूल करणारे आहे.

प्रकरण २.१२ - प्रकल्प क्षेत्रात औद्योगिक कंपनी नाही. किनाा-यापासून १७५ किलोमिटर क्षेत्रात उद्योग नाही असे म्हटले आहे. प्रत्यक्षात जिंदाल प्रकल्प जवळच आहे. खंडकांच्या पृष्ठभागाचे तुकडे होवून प्रदूषित द्रव्ये बाहेर पडणार असे म्हटले आहे यावरील परिणाम व उपाय सांगितलेले नाही.

प्रकरण ३.१ - येथील प्रकल्पामुळे होणारे परिणाम व हवामानाचा अभ्यास शासनाने करुन अहवाल प्रसिध्द करावा.

प्रकरण ३.९ - प्रकल्पामुळे वाहतूकीत वाढ होईल. यामुळे अपघात व प्रदूषणात वाढ होईल. यासाठी कंपनीने नुकसान भरपाईची लेखी हमी दयावी.

प्रकल्पामुळे मिळणा-या रोजगार संधी, शैक्षणिक संधी, आरोग्य याबाबत कंपनीकडून लेखी हमी घ्यावी.

प्रकरण ३.१० - सामाजिक व आर्थिक बाबी यांचा विचार करता सांडेलावगणचा तक्ता नाही. जयगडचा आहे ही धूळफेक आहे.

लावगण गावाला २४ तास पाणी १२ महिने देतो असे म्हटले आहे हे कसे काय? कारण सद्य परिस्थित सकाळी फक्त अर्धातास पाणी मिळते.

अहवालात लावगण गांव सक्षम नाही असे म्हटले आहे. येथील लोक गाडया फिरवतात येथील फक्त २२ कुटूंबे दुर्बल आहेत. यामुळे अहवाल फेटाळावा.

कंपनीवाले कोणता रोजगार देणार त्यासाठी कांय कोर्स करायचे हे सांगितले नाही. यासाठी आम्ही कोर्स सुरु करण्याची मागणी करतो पण अद्याप उपलब्ध नाही.

पत्रात म्हटले आहे कोळसा वाहतूक करणार अहवाल खोटा आहे. यावर

कंपनीचे सल्लागार डॉ. उमेश कुलकर्णी यांनी कोळसा वाहतूक केली जाणार नाही असे स्पष्टीकरण केले.

४. श्री. अनिरुध्द साळवी - प्रकल्पामुळे परिणाम होणा-या जयगड, साखर मोहल्ला गावातील लोक येथे उपस्थित आहेत. या सर्वांना बोलू दयावे.

५. श्री. प्रभाकर शिंदे - प्रकरण ३.१२ - जैविक पर्यावरणाचे परिक्षण करण्यासाठी ३ महिन्यांचा अवधी दया.

प्रकरण ४.१ - पर्यावरणाचे संभाव्य परिणाम, उपाययोजना व नियंत्रण याचा अभ्यास करण्यासाठी जिल्हाधिकारी याच्या अध्यक्षतेखाली समिती नेमावी.

प्रकरण ५ - प्रकल्प क्षेत्रात लोक वस्ती नाही. हे खोटे आहे.

प्रकरण ७ - यातील माहिती चुकीची आहे.

प्रकरण ८ - येथील योजनेची सत्यता पडताळणी करण्यासाठी २-३ महिन्यांचा अवधी मिळावा.

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प्रकरण ६.१ – कोळसा बारीक करणा-या यंत्रामधून उष्णतेचे उत्सर्जन होईल असे म्हटले आहे. यावरील उपाययोजना स्पष्ट नाहीत.

जोडपत्र- ३ पान १० – प्रकल्प ठिकाणी संवेदनशील विभाग नाहीत असे म्हटले आहे प्रत्यक्षात स्मशानभूमी आहे.

RERA अभ्यासगट व अपघांताची नोंद यासाठी दिलेली वेब साईट शोधल्यावर माहिती मिळाली नाही.

अहवालात हवेची दाखवलेली दिशा चुकीची आहे.

अहवालामध्ये अनेक तांत्रिक त्रुटी आहेत. अहवाल दिशाभूल करणारा आहे. म्हणून सुनावणी स्थगित करावी.

६. अनिरुध्द साळवी, जयगड – लोकांनी विश्वासाने कंपनीला जमिनी दिल्या परंतु कंपनीने आमचा विश्वासघात केला. सुनावणी मालधक्का प्रकल्पाची आहे. साखरमोहल्लामधील लोकांची घरे पाण्याजवळच आहेत. पाण्याचा धोका साखरमोहल्ला भागाला होईल. वाहतूक करतांना खाली पडलेल्या बॉक्साईटच्या ढिगा-यांमुळे माश्यांवर परिणाम होतो. कोळश्याची वाहतूक करणार नाही यासाठी कंपनीने वचन दयावे. आम्हाला मालधक्का प्रकल्प नको आहे.

७. मुश्ताक टेमकर, सरपंच साखरमोहल्ला – प्रस्तावीत जेटीच्या ठिकाणी खाजण आहे. तेथे माशांची उपलब्धता असते. चौगुले कंपनी आमचे जीवन उध्वस्त करणार आहे म्हणून येथे जेटी उभारु नये. धामणखोल येथे जेटी मंजुर झाली आहे म्हणून जेटी नको. जेटीच्या भरावामुळे पाण्याची पातळी वाढेल, पाण्याचा वेग वाढेल, किना-याचा भाग घसरट होईल व पाणी आमच्या घरात घुसेल म्हणून जेटी होवू देवू नये.

८. महेश राघोबा नाटेकर – गुहागर तालुक्यात राहतो. कंपनी जेटी उभारणार आहे व ड्रेझिंग करणार आहे. येथे मोठी जहाजे लागतील प्रकल्पाबाबतची नोटीस व अहवाल आम्हाला सादर केलेला नाही. समुद्रात मच्छीमारी ४ महिने बंद असते या काळात खाडीत मासेमारी केली जाते परंतु आता हे उपजीवीकेचे साधन नष्ट होईल.

कंपनी म्हणते प्रकल्पाचा अभ्यास केला आहे. त्यांनी मच्छिमारांबरोबर चर्चा करावी. प्रकल्पामुळे काय विपर्यास होईल याची माहिती द्यावी. पर्यावरण बाबतचा अहवाल प्रत्येक संस्थेला मिळाला पाहिजे. सर्वांना विश्वासात घेतले पाहिजे.

९. रविंद्र पोटफोडे, जयगड - अहवाल संबंधीत सर्व ग्रामपंचायतींना दिले नाहीत म्हणून सुनावणी रद्द करावी. आधी सर्व ग्रामपंचायतींना अहवाल द्या मग सुनावणी घ्या. धामणखोल येथे बंदर होत आहे म्हणून या बंदराची आवश्यकता नाही.

१०. निलेश विश्वनाथ सुर्वे, ता. गुहागर - कंपनीने जो हवेची तपासणी निरिक्षण केंद्रे निर्माण केली तेथून २.५ किमी अंतरावर तौसाळ, कातळ गावे आहे तेथेही तपासणी करायला पाहीजे कारण प्रकल्पाचा त्रास तौसाळ गावालाही होणार आहे. म्हणून पर्यावरणाच्या दृष्टीने कातळ गावाचा विचार व्हावा.

११. अस्लम गुहागरकर, साखरमोहल्ला - प्रदूषण नियंत्रण करु असे कंपनीवाले आज म्हणत आहेत. कंपनीचा धंदा साखरमोहल्ला भागात येतो तेथील प्रदूषण नियंत्रण केले नाही. साखरमोहल्ला गांव ५०० मीटर अंतरावर आहे. रात्री आवाजाचा त्रास होतो, वाहतुकीचा माल बाजूला पडतो तो उचलून कंपनी बाहेर फेकते. मच्छीमार लोक ५०० मिटरच्या आतमध्ये पारंपारीक होडयांद्वारे मच्छीमारी करतात त्यावर परिणाम होईल.

आमचा ड्रेजींगला विरोध आहे जर कंपनीने ड्रेजींग केले तर आम्ही ड्रेजरची परिस्थीती टाईट करुन टाकू.

जहाजाच्या वाहतुकीमुळे मासळी नष्ट होईल जहाजात उरलेले बॉक्साईट प्रेशरने पाणी मारुन धुतले जाते त्यामुळे देखील मासळीवर परिणाम होतो.

जहाज दुरुस्ती प्रकल्पामुळे ध्वनी प्रदूषण होईल याचा लोकांना त्रास होईल म्हणून आम्हाला प्रकल्प नको सध्या सुरु असलेला प्रकल्प ठिक आहे आम्हाला नवीन प्रकल्प नको.

१२. उदय माने - कंपनी बॉक्साईट निर्यात करते त्यापोटी कररुपाने ग्रामपंचायतीला उत्पन्न मिळत नाही. जर उत्पन्न मिळाले तर ग्रामपंचायतीचा विकास होईल.

१३. परशुराम पांस्ते, सरपंच ग्रामपंयायत कासारी - कंपनीने कवडीमोल भावाने जमीनी विकत घेतल्या. कंपनी जहाज दुरुस्ती उद्योग सुरु करु असे म्हणतेय पण आता ३-४ कंपन्या उपस्थित झाल्या आहेत. बारदान लांबविणे प्रकल्प म्हणजे काय? ड्रेजींगमुळे काय परिणाम होणार याचा अहवाल दिला नाही. कंपनीवाले एकदाच ग्रामपंचायत कार्यालयात आले. कंपनीची स्टोरी कोरी आहे. सुनावणी पुढे ढकलावी.

१४. मा. आमदार श्री उदय सामंत - ज्या जागेत प्रकल्प होणार तेथे दुर्घटना घडली आहे. म. प्र. नि. मंडळाच्या अधिका-यांशी या बाबत चर्चा करुनही त्यांनी याचा विचार केला नाही. यापूर्वी श्री. शिंदे, श्री. साळवी व श्री. बोरकर यांनी मांडलेल्या मतांशी मी सहमत आहे. प्रकल्पाचा अहवाल लोकप्रतिनिधींना दयायला पाहिजे. प्रकल्प यावा व रोजगार मिळावा यात शंका नाही. कंपनीने सर्व गोष्टींची पुर्तता करुन ग्रामस्थांना न्याय दयावा. सुनावणी पुढे ढकलावी. शासनाने साखर मोहल्लातील लोकांना विश्वासात न घेता प्रकल्प लादला आहे.

अहवालातील १७.०७ अक्षांश आरे वारे भागाचे आहेत व १७.१८ अक्षांश धामणखोलचे आहेत. नकाशात साखर मोहल्ला दाखविलेला नाही. याबाबत पारदर्शकता पाहिजे. अहवाल दिशाभूल करणारा आहे याची चर्चा होते म्हणून MPCB शासन, लोकप्रतिनिधी व लोक यांच्यात समन्वय पाहिजे. लोकांनी जी निवेदने आहेत त्याचा विचार व्यायला पाहिजे . प्रकल्प बदलला म्हणून लोकांमध्ये गैरसमज आहेत. गावस्तरावर बैठका घ्याव्यात. प्रकल्प नक्की कोठे होणार याचा खुलासा व्हावा.

रोजगाराचा प्रश्न बिकट आहे. प्रकल्पग्रस्तांना लेखी रोजगाराचे आश्वासन कंपनीने दयावे. प्रकल्पाचा खुलासा व्हायला पाहीजे. कंपनी जमीन घ्यायच्या आगोदर खोटी आश्वासने देते. जोपर्यंत प्रकल्पग्रस्तांना न्याय मिळत नाही तोपर्यंत प्रकल्प सुरु करु नये.

श्री. शिंदे व श्री. बोरकर यांनी सुनावणी पुढे ढकलण्याबाबत केलेल्या मागणीला मी पाठिंबा देतो: मला यापुर्वी झालेल्या फिनोलेक्सच्या सुनावणीचे इतिवृत्त मिळावे. सर्व कागदपत्रांची पुर्तता झालेनंतरच जनतेसमोर यावे तोपर्यंत ही सुनावणी पुढे ढकलावी.

१५. श्री. वसंत सुर्वे, माजी नगराध्यक्ष, रत्नागिरी नगर परिषद महाराष्ट्र राज्य बंदर सल्लागार समिती सदस्य - रत्नागिरी मध्ये उद्योगाची सुरवात विश्वासराव चौगुले यांनी केली. त्यांनी २५-३० मच्छीमारांना बोटी दिल्या. चौगुलंनी नर्मदा सिमेंट कंपनी आणली व यामुळे लोकांना कामधंदा मिळाला. हा प्रकल्प चौगुलेंचा आहे. प्रकल्पाच्या ज्या त्रुटी आहेत त्याचा उहापोह करुन योग्य असेल तर प्रकल्प व्हावा प्रकल्प जर योग्य असेल तर प्रकल्पाला मदत करावी.

१६. श्री. नितीन पाष्टे, सांडे लावगण -
प्रकरण २.२ मधील प्रकल्पाच्या रुपरेषेमध्ये बांधा, वापरा व हस्तांतरीत करा म्हटले आहे हे कळले नाही.

प्रकरण २.३ कोस्टल लेंड नकाशा यात रंगवलेला भाग दाखवीला आहे जे लिहीले ते मराठीत नाही. रोडेड भाग चौगुलेंनी विकत घेतलेली जमीन आहे. त्या व्यतिरिक्त दाखवलेला आहे.

प्रकरण २. ८ - बर्थ पॅकेट म्हणजे काय? ड्रेजींग केल्यावर निघालेला गाळ कुठे टाकणार हे नमुद केलेले नाही.

प्रकरण २.१२.१ - स्थानिक वातावरणानुसार त्याच्या शुष्क स्थीतीमध्ये लॅटराईट फॉर्मेशन होते. पृष्ठ भागाचे तुकडे-होवून त्यातून सिलीका, मॅग्नेशियम व पोटॅश तुकडे बाहेर टाकले जातात. याचा काय परिणाम होईल?

प्रकरण ३.४ अहवालातील वा-याची दिशा व आताची वा-याची दिशा या विरुध्द आहेत.

आता दाखविलेल्या स्लाईड-शो मध्ये सांडपाण्यावर प्रक्रियेसाठी STP उभारणार म्हटले आहे परंतु प्रक्रियाकृत सांडपाणी कोठे सोडणार हे अहवालात नमूद नाही.

१७. श्री. कुमार शेटये, माजी पंचायत समिती सभापती - यापूर्वी श्री. बोरकर, श्री. शिंदे यांनी मांडलेल्या मुद्दयांचा विचार व्हावा. ग्रामस्थांची मालमत्ता व जमीनीचे प्रकल्पामुळे नुकसान होवू नये. तांत्रीक मुद्दयांची दुरुस्ती करावी. ग्रामस्थांना माहिती दिली गेली नाही. त्यांच्या जागा जहाज दुरुस्ती प्रकल्पासाठी घेतल्या व आता बंदर प्रकल्पाची सुनावणी आहे याचा विचार व्हावा.

श्री. चौगुले कंपनीत काम केले आहे त्यांनी चांगले काम केले आहे. नर्मदा सिमेंट कंपनीत १००-१५० लोकांना रोजगार मिळाला आहे. कंपनी बद्दल लोकांना असलेल्या विश्वासाला तडा जावू देवू नये. लोकांची पोटतीडकी लक्षात घेतली पाहिजे. जहाज बांधणी करण्यासाठी बंदर करावेच लागणार आहे. प्रकल्पामुळे हानी होणार नाही याची खबरदारी घ्यावी. लोकांच्या शंकांचे निरसन करावे व प्रकल्पाची सविस्तर माहिती ग्रामस्थांना दयावी. चौगुले कंपनी विश्वासार्ह आहे. जनसुनावणी पुढे ढकलून पुन्हा एकदा घ्यावी.

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१८. श्री. दिलीप गडदे – कंपनी लावगणमध्ये जेटी धक्का बांधणार आहे, याचा संबंध खाडी पर्यंत येतो. बरेच मच्छीमार खाडी लगत राहतात. या सुनावणीला पलीकडच्या लोकांनाही विश्वासात घेतले पाहिजे. त्यांनी स्वतःचे निवेदन वाचून दाखवले. भराव टाकण्यास विरोध आहे कारण याचा वसाहतींना त्रास होईल. लोकांच्या प्रश्नांबाबत योग्य विचार न केल्यास आम्हाला कोर्टात रिट दाखल करावे लागेल.

१९. श्री. गुलाम महंमद नाईक, जयगड – कंपनीवाले रुपये १०,०००/- ची देणगी देणार होते ती अजून दिली नाही. ते आम्हाला कंपाउंडमध्ये येवू देत नाहीत तसेच गुरेही चस देत नाहीत. कंपनी दंडेलशाही करते ते ७५० फुटांचा भराव करणार आहेत. मी ३० वर्षे रेशनींग वाहतूक केली आहे. जिंदालने धामणखोल येथे पाण्याचा भराव केल्यामुळे गावात खाडीचे पाणी भरते. कंपनीने शेतक-यांचा विचार केलेला नाही. म्हणून आम्हाला जनसुनावणी नको. बॉक्साईटच्या पावडरमुळे बागायती पीकांवर परिणाम झाला आहे. वाहतूक करताना ट्रक ताडपत्रीने झाकलेली नसते. ५ ग्राम पंचायतींना माहिती कळविल्या शिवाय सुनावणी घेवू नये.

२०. श्री. कमलाकर केशव साळवी – शासनातर्फे टेक्नीकल एक्सपर्टनेमून शासनाने प्रकल्पाची माहिती द्यावी. कंपनीवाले टेक्नीकल एक्सपर्ट नेमतात परंतु ते कंपनीच्या बाजूनेच बोलतात. डेजींग केलेला गाळ खोलगट भागात टाकावा. असे आसतांना गाळ वाटेल तेथे टाकला जातो. चिखल ५० एकरमध्ये जेथे मैदान करतात तेथे टाकावा समुद्रात टाकू नये. साखरमोहल्ल्याची घरे पाण्याखाली जातील हे बरोबर आहे म्हणून डेजींगचा चिखल योग्य ठिकाणी टाकावा.

२१. श्री. प्रभाकर शिंदे – ज्या भागाचा अभ्यास केलेला नाही त्या ठिकाणचा अभ्यास करुन पुन्हा सादरीकरण करावे.

२२. श्री. कमलाकर केशव साळवी – मच्छीमार सोसायटींना, सर्व प्रोजेक्ट अफेक्टेड लोकांना व यातील सर्व ग्रामपंचायतींना बोलावलेच पाहिजे. CWPRS, खडकवासला व पर्यावरण संचालक यांचे लोकांना बोलवा.

जनसुनावणीच्या अध्यक्षांनी सांगीतले की येथे उपस्थित आलेले सर्व आक्षेपांची नोंद घेवून ते पर्यावरण व वने मंत्रालयास कळविले जातील व या इतिवृत्ताची एक प्रत ग्रामपंचायतीला देण्यात येईल.

यावर उपस्थितांनी प्रकल्प भागात येणा-या सर्व ग्रामपंचायतींना इतिवृत्ताची प्रत मिळावी ही मागणी केली यास प्रादेशिक अधिकारी, मप्रनि मंडळ, कोल्हापूर यांचे प्रतिनिधी श्री. शिंदे यांनी सांगितले की प्रत्येक ग्रामपंचायतीने जर मागणी केली तर त्यांना इतिवृत्ताची प्रत देण्यात येईल.

२३. श्री. प्रभाकर शिंदे - जिंदाल प्रकल्पाची सुनावणी रत्नागिरीला होती उपस्थितांनी प्रकल्पाच्या ठिकाणीच सुनावणी घ्यावी असे म्हटल्यावर ती पुढे ढकलली होती.

जनसुनावणीनचे अध्यक्षांनी खुलासा केला की आजची सुनावणी आपले गावातच घेण्यात येत आहे.

२४. श्री. प्रभाकर शिंदे - सर्व ग्रामपंचायतींना अभ्यास करण्यासाठी सुनावणी पुढे ढकलावी.

प्रकल्पाचे अधिकारी श्री. दिलीप भाटकर यांनी सांगीतले की मी इथला भूमी पुत्रच आहे व जमीन खरेदी करताना मी दिपक चौगुलेबरोबर फिरत होतो. लोकांना जास्त रोजगार मिळवून देणारा जहाज दुरुस्ती प्रकल्प पहिल्यांदा कार्यान्वित होईल कंपनी आपल्या सर्वांच्या मताचा आदर करील.

यानंतर उपस्थितां पैकी काहींनी सुनावणी रद्द करा असे म्हणून गोंधळघालण्याचा प्रयत्न केला. ते शांत होण्याची वाट बघून शेवटी मा. अध्यक्षांनी सुनावणी संपल्याचे जाहीर केले.

(मधुकर गायकवाड)
जिल्हाधिकारी रत्नागिरी तथा
जनसुनावणीचे अध्यक्ष.

(नितिन शिंदे)
प्रादेशिक अधिकारी, मप्रनि मंडळ,
कोल्हापूर यांचे प्रतिनिधी.

(न. ह. शिवांगी)
उप प्रादेशिक अधिकारी
मप्रनि मंडळ, रत्नागिरी
तथा जनसुनावणीचे संयोजक

Minutes of the Environmental Public Hearing of M/s Jaigad Port Infrastructure Pvt. Ltd. for their proposed Port Project

The Environmental Public Hearing of M/s. Jaigad Port Infrastructure Pvt. Ltd., Sande Lavgan, Tal. & Dist. Ratnagiri for their proposed Port Project was conducted on 14.7.2008 at 11.00 AM at venue near Primary School, Sande Lavgan. Following panel members were present for the Public Hearing.

1. Shri. Madhukar Gaikawad :- District Collector and Chairman.
2. Shri. Nitin Shinde :- Representative of Regional Officer, MPCB, Kolhapur.
3. Shri. Narsinha Shivangi :- Sub-Regional Officer, MPCB, Ratnagiri and Convener.

The Chairman of the public hearing welcomed to all & informed that this public hearing is being conducted as per notification of Ministry of Environment & Forests, New Delhi. The Project Consultant will first inform about the project & then the participants may ask for their doubts, questions if any. He then informed the convener to start the proceedings of the hearing.

Mr. N. H. Shivangi, Sub Regional Officer, MPC Board, Ratnagiri & convener of the public hearing also welcomed to all & informed that this public hearing is being conducted as per notification of Ministry of Environment & Forests, New Delhi dated 14th September 2006. The purpose of the public hearing is to take in to account public views & objections about the projects. The participants can express their views & can also submit representation. The minutes of the public hearing, representations of public & video CD of the public hearing will be submitted to Ministry of Environment & Forests through MPCB Head Office. The Project Consultant will initially inform about the project & then the participants can ask for their doubts.

With the permission of Chair Dr. Umesh Kulkarni, Project Consultant gave brief description of the project by slide show.

He informed about location of project. As per built, operate & transfer policy of State Government Jaigad is one of the seven declared places. Four times road widening up to

National Highway & Rail Link Scheme from port is planned. The cost of project is 292 crores.

He then informed about Jaigad Port. In this area mud percentage is less. In western Maharashtra industrial policy is increasing towards imports. This company has successfully exported bauxite in last five years. In order to have speedy handling of material there will be minimum three jetty with length 450 meters & breadth 27 meters. The material handled will mostly be textile & flowers and polluting material will not be handled.

Company is having sufficient land for this project. Study & guidance is obtained from NIOT & CWPRS which are Government authorized institutes. NIOT has carried out study of high tide & low tide stream waves. CWPRS has carried out high tide -low tide & sludge formation study. HPTI, Germany has planned about ship transport route. Surface & under water soil testing is also carried out. Maharashtra Coastal Zone Management Authority (MCZMA) has given permission for the project on 26th September 2008. Tidal difference observations are made by NIOT.

Dredging will be carried out for sufficient depth channels in berth packets. Total 2.5 million m^3 dredging is required. The dredging sludge will be used for land filling this will not have effect on land & water quality. There are no mangroves & other plantation at project site. High capacity ports are essential as there is increase in import & export.

Sufficient provision of made for other major parts of project like fire protection equipments, electricity, water supply & sanitation. Environmental observatory for testing is set up at 5 locations at project site. Ambient air quality & noise level monitoring is carried out at these locations. Company has prepared environment management plan. Considering the possibilities environmental degradation during project commissioning & project operation phase necessary control measures are implemented. The project proponent has prepared Environmental Management Plan & Emergency Management Plan.

The traffic jam problem around Mumbai Port will be reduced due to establishment of

this project. This will help in reduction of noise & air pollution. Company will take all the precautionary measures during operation of project so as not to cause any adverse effect on the environment.

After the presentation given by consultant of project proponent the Chairman of Public Hearing requested the participants to ask for their doubts & questions. The summary of questions & answers given by the consultant of project proponent is as below :-

1. Mr. Sharad Baliram Borkar, ZP Member :-

Company has purchased the land for this project before 17-18 years. Which land they are going to utilize for the project?

Company is going to set ship repair & cargo transport project but this public hearing is only of cargo transport project. Whether the project study is done for proposed location or for other different location? Because the 17.07 longitude mentioned in the project is of Are-Ware place. In the summary the location of dry dock jetty is towards right side but we got the information of left side only. The distance of first jetty from second jetty is not mentioned. We are not against the project, we will welcome the project however we will not accept wrong information.

Project Consultant :- Permission for the project was granted in the year 2000. The typing mistake regarding longitude of project site will be corrected. Public hearing is not required for ship repair project.

2. Mr. Prabhakar Shinde, Sande Lavgan :- Whether the Marathi translation of English report is correct? In the English report Jaigad location is mentioned after Ratnagiri. Map is not enclosed in Marathi project. Project study is not perfect & that too not in detail. There are four Grampanchayats falling in project location however the report is given only to Kasari Grampanchayat. Report is not given to Nadivade, Chaferi Grampanchayats. There are 10 Chapters in the report. We have given land for the project. We dream to change our Konkan area into California. We have objections about the project. The peoples have given 243 acres of land for the project. In the Marathi report 'Bardan Project' is mentioned. What is mean by 'Bardan Project'? English words are used in Marathi Project. The project consultant

finished presentation about the project within 20 minutes. Company officers should accept the written agreement here. The locals should be taken in to confidence. The project report shall be true & transparent. The public hearing shall be conducted as per convenience of people. Explanation is not given for the things which are going to affect. The public hearing shall be postponed for 3 months so as to study the project. Peoples have give their land for the project before 17 years. That time young children have now grown up to the age of 35 years but still they are unemployed. Company should take responsibility for this. Hearing shall not be conducted unless written explanation is given by company officers.

We have given land for dry dock project, copy of the agreement is with us; still you are conducting the hearing of 'Bardan Project'. As per letter from Industry Department dated 31.5.1993 Government has given permission for dry dock & ship repair project & not for 'Bardan Project'. In the report it is mentioned that there is no sensitive place in the project site however there is Smashan Bhumi within the project site.

As per order of District Collector, Ratnagiri vide letter dated 30.6.2004 company has purchased the land for ship repairing project however today's public hearing is of 'Bardan Project'.

There is provision that in case if the land acquisited for specific purpose is not used within the stipulated timeframe for that purpose in such case the land shall be given back, we want explanation for this. Some of the area mentioned in the report is not yet purchased. The hearing shall be postponed for these reasons.

Chairman informed that today's hearing is environmental public hearing hence pollution related questions shall be asked.

3. Mr. Prabhakar Shinde :-

Chapter 1.2 – Project background mentioned in the report can't be understood by common man. Permission to change the old place by new place is not obtained. Central Government's permission for new place shall be declared. The latitude & longitude mentioned in the report are of another place. We shall be provided technical expert with the expenses of company.

Chapter 2.2 – Land erosion will take place due to 2.5 million m^3 dredging. The increasing depth will cause adverse effect in Sakhar Mohalla area.

Chapter 2.9 – There are no mangroves & Khajan areas in project site. This statement is wrong.

Chapter 2.12 – There is no industry within project area. It is also mentioned in the report that there is no any industry within distance of 175 Kms. from the coast area. However Jindal project is very near. It is mentioned that polluting matter will be released after breaking the rock surface, the effects & control measures are not mentioned.

Chapter 3.1 – Government should publish the study report about local climate & project effects on it.

Chapter 3.9 – Traffic will increase due to the project. this will result into increase in pollution & accidents. Company should give written guarantee for this.

Company should give written guarantee for education & employment opportunities & for health.

Chapter 3.10 – Considering the social & economical things the table is not of Sandelavgan. It is of Jaigad. Company is throwing the dust in our eyes.

It is mentioned that regular water supply for 24 hours for whole year is made. The fact is water supply is made for only half an hour.

It is mentioned in the report that Lavgan is not a capable village. Many of the residents have owned vehicles & only 22 families are below poverty line. Hence the report shall not be accepted.

Which type of employment opportunities will be created & which courses shall be done is

not mentioned. We are demanding to start the courses however the opportunities for this are not available. It is mentioned that coal transportation will be done hence the report is not true.

The project consultant replied that coal transportation will not be done.

4. Mr. Anirudhha Salvi – The project affected peoples from Jaigad, Sakhar Mohalla are attending the hearing. They shall be given opportunity to express their views.

5. Mr. Prabhakar Shinde :-

Chapter 3.12 – We shall be granted additional 3 months period in order to study the ecological environment.

Chapter 4.1 – A committee shall be formed under the Chairmanship of District Collector to study the possibilities of environmental changes, mitigation & control measures.

Chapter 5 – There is no human habitation in the project area this statement is wrong.

Chapter 7 – The information given is wrong.

Chapter 8 – We shall be granted 3 months period to assess the truth of scheme.

Chapter 6.1 – Heat will be released from coal grinding machine. The control measures for this are not explained.

Annexure 3 Page 10 – It is mentioned that there is no sensitive zone in the project site however the crematoria is within site.

We searched the web site for RERA Study Group & Accident Report but the information is not obtained.

The wind direction mentioned in the report is wrong.

There are many technical mistakes in the report. Report is misleading hence stay shall be given to the hearing.

6. Aniruddha Salvi, Jaigad :- Peoples have faithfully given land to the company but company has cheated us. The hearing is of Jetty Project. The homes of Sakhar Mohalla peoples are near water site hence water thrust will be caused in this area. The falling bauxite during transport has harmful effect on fishes. Company shall give undertaking that they will not transport the coal. We do not want Jetty project.

7. Mushtak Temkar, Sarpanch, Sakhar Mohalla :- Fish availability is observed near jetty area. Chougule company will vanish our life hence we don't want jetty project. Jetty is already sanctioned at Dhamankhol hence we don't want jetty now. Water level will rise due to jetty land filling, water current & speed will rise, the bank will become slippery & water will enter in our homes therefore jetty shall not be permitted.

8. Mr. Mahesh Raghoba Natekar – I live in Guhagar Taluka. Company is going to construct jetty for which dredging will be done also large sized ships will come here. Project notice & report is not submitted to us. Fishing is not done in sea for 4 months in this period fishing is done in creek area but now this source of income will also be vanished.

Company states that they have carried out project study. They should discuss with fishermen. The effects of project shall be informed to us. The environment report shall be given to every institute & all shall be taken in to confidence.

9. Mr. Ravindra Potfode, Jaigad :- The hearing shall be cancelled as reports are not given to all the concerned Grampanchayats. First the report shall be given to all the Grampanchayats & then hearing shall be conducted. Already a port is coming up in Dhamankhol hence this port is not required.

10. Mr. Nilesh Vishwanath Surve, Residing in Guhagar Taluka :- Tausal & Katal villages are at a distance of 2.5 Kms. from the air quality observation centres installed by the company hence testing shall be done in these villages also. Because, project nuisance will also be caused to Tausal village. The Tausal & Katal villages shall be taken into account considering the environmental effects.

11. Aslam Guhagarkar, Sakhar Mohalla :- The company representatives now says that pollution will be controlled. The company activities are in Sakhar Mohalla area & this area's pollution is not controlled. Sakhar Mohalla village is about 500 meters away. Noise nuisance is caused during night time. The material wastage during transport is thrown outside. Fishermen are doing the fishing within 500 meters distance using traditional boats this will be affected.

We are opposing the dredging & if company carries out dredging then we will tight the dredger position.

Fishes will vanish due to ship transport. The remaining bauxite is cleaned by using pressure water this will also have adverse effect on fish availability.

Noise pollution is created from ship repairing & this causes nuisance to the public hence we don't want the new project. The existing project is OK.

12. Mr. Uday Mane :- Company exports bauxite & for this they are not paying any tax to the Grampanchayat. Development will be caused if income from tax is received to Grampanchayat.

13. Mr. Parshuram Paste, Sarpanch Grampanchayat Kasari – Company has purchased the land by giving very low price. Company says that they are going to start ship repair project but now 3-4 companies are introduced. What is the meaning of 'Bardan Handling Project'? Report about effects of dredging is not given. Company representatives have visited the Grampanchayat office only for one time. The CD given by the company is blank. The hearing shall be postponed.

14. Hon'ble MLA Mr. Uday Samant :- A problem has occurred in the project area. I have discussed about this with MPCB officers but they have not considered it. I am agree with the views expressed by Mr. Shinde, Mr. Salvi & Mr. Borkar. The project report shall be given to public representatives. There is no doubt that project should come & people should get employment. Company should fulfill all the requirements & give justice to the villagers. The hearing shall be postponed. Government has permitted this project without taking in to confidence the Sakhar Mohalla villagers.

The latitude 17.07 are of Aare-Ware area & 17.17 are of Dhamankhol area. Sakhar Mohalla area is not shown in the map. There should be transparency for this. It is discussed that the project report is misleading therefore there should be co-ordination between MPCB, Government, Public Representatives & Public. The representations given by public shall be considered. People are confused due to change of project. Meetings shall be conducted at village level & explanation about project site shall be given.

Here unemployment problem is serious. Company should give written assurance for employment. Explanation of the project shall be given. Company gives false promises before purchase of land. Unless the projected affected persons are give justice project shall not be started.

I support the hearing postponement demand made by Mr. Shinde & Mr. Borkar. I should get the minutes of earlier public hearing of M/s. Finolex. Company should come to public after compliance of documents till than the hearing shall be postponed.

15. Mr. Vasant Surve, Ex. President- Ratnagiri Municipal Council, Member- Maharashtra State Port Suggestion Committee :- Mr. Vishwasrao Chougule is the founder of industrial development in Ratnagiri. He gave 25-30 boats to fishermen. Narmada Cement Company brought by Mr. Chougule has given employment to people. This project is of Mr. Chougule. After discussing the discrepancies of project & if found suitable the project shall be supported & permitted.

16. Mr. Nitin Paste, Sande Lavgan :-

Chapter 2.2 – In the project background it build, operate & transfer is mentioned. I do not understand the meaning.

Chapter 2.3 – Coloured portion is shown in coastal land map & whatever written is not in Marathi. In the shaded portion the other land than purchased by Mr. Chougule is shown.

Chapter 2.8 – What is the meaning of Berth Packet? The information about disposal of dredging sludge is not mentioned.

Chapter 2.12.1 – Laterite formation takes place in dry condition of local climate. Silica, magnesium & potash pieces are thrown out after breaking of surface. What effect it will cause.

Chapter 3.4 – The wind direction mentioned in the project & current wind direction are opposite.

In the slide show it is mentioned that STP will be provided for sewage treatment. But the point of disposal of treated effluent is not mentioned.

17. Mr. Kumar Shetye, Ex. President Panchayat Samiti :- The technical points raised by Mr. Borkar & Mr. Shinde shall be consider[illegible]he property & land of villagers shall not be

affected. Technical points shall be corrected. Peoples are not given information their lands are taken for ship repair project & now the public hearing is of port project this point shall be considered.

I have worked in Chougule company. The company has done good work. In Narmada Cement Company employment is given to 100-150 people. The trust of people with company shall not be breaked. The gravity of feeling of people shall be considered. Port construction is essential for ship building. Due care shall be taken for not to have any adverse effect due to the project. The doubts of people shall be clarified & detail information of the project shall be given to the people. Chougule company is trustful. The public hearing shall be postponed.

18. Mr. Dilip Gadade :- Company is going to construct Jetty at Lavgan, this will have effect up to creek. Most of the fishermen are staying near creek area. The people staying at another side of creek shall also be taken in to consideration. He read his representation. The bund construction will affect the human habitation therefore people are against it. In case people's problems are not considered us will go in the court of law.

19. Mr. Gulam Mohammed Naik, Jaigad :- Company people have promised to give donation of Rs. 10,000/- which is not yet given. They are neither allows us to enter in their premises nor allows our animal to feed the grass. Company is adamantly behaving with us. They are going to construct a bund of 750 feet. I have done rationing transport for 30 years. Due to construction of bund by M/s. Jindal at Dhamankhol creek water enters in the village. Company has not thought about farmers. We don't want public hearing. The bauxite powder has caused adverse effect on crops. The vehicles are not covered with tarpaulin sheet during transport. The hearing shall not be conducted unless 5 Grampanchayats are given information about project.

20. Mr. Kamalakar Keshav Salvi :- Government shall appoint technical expert & give the information of project to people. Company appoints technical expert but he gives the report in favor of the company. The dredging sludge shall be disposed at low lying area in spite of this the sludge is dumped at anywhere. The sludge shall be disposed at the place of 50 acre

area where ground will be prepared & not in the sea. The homes at Sakahar Mohalla will go under water is true therefore the dredging sludge shall be disposed at proper place.

21. Mr. Prabhakar Shinde :- Study of uncovered area shall be undertaken & shall be presented once again.

22. Mr. Kamalakar Keshav Salvi :- Fishermen's Society, all the project affected people & all the Grampanchayats shall be invited. CWPRS, Khadakwasala & Director of Environment representatives shall be invited.

The Chairman of Public Hearing informed that all the points raised during the hearing will be noted & submitted to Ministry of Environment & Forests copy of the minutes will also be given to the Grampanchayat.

The participants demanded that all the Grampanchayats shall be given copy of the minutes. The representative of Regional Office, Kolhapur informed that copy of the minutes will be given to other Grampanchayats if they demands for the same.

23. Mr. Prabhakar Shinde :- The public hearing of Jindal project was organized at Ratnagiri & after the demand of participants to conduct at project site it was postponed.

For this the Chairman informed that today's public hearing is being conducted in your village.

24. Mr. Prabhakar Shinde :- The hearing shall be postponed in order to study the project by all the Grampanchayats.

The representative of the project proponent informed that I am also a local person & I have traveled with Mr. Dipak Chougule while land purchasing was under progress. The more employment generating ship repair project will be initially started, company will respect for your views.

After this some of the participants demanded for postponement of the hearing & they started shouting. The Chairman waited for some period to become them calm & finally declared that public hearing is completed.

(Madhukar Gaikawad)
District Collector & Chairman of Public Hearing

(Nitin Shinde)
Representative
Regional Officer, MPCB, Kolhapur
& Member of Public Hearing

(N. H. Shivangi)
Sub Regional Officer
MPCB, Ratnagiri
& Convener of Public Hearing

Annexure – V

Undertaking

Annex 16

ANGRÉ PORT PRIVATE LIMITED
Registered Office : 4th Floor, Plot 229, Bakhtawar Building, Ramnath Goenka Marg,
Nariman Point, Mumbai - 400021, India. | CIN-U63032MH2003PTC335797

Dated: 26-09-2023

Letter No. APPL/HSE/MOEFCC/0015

To,

Integrated Regional Officer,
Ground Floor, East Wing,
New Secretariat Building,
Civil Lines Nagpur – 440001

Subject: Undertaking for all the information submitted vide letters dated 28.09.2008, 20.06.2008 & 30.03.2010 & presented during the meetings held on 22nd-24th august 2007, 22nd -23rd October 2008 & 25th – 26th February 2010 shall be strictly complied,

Respected Sir,

Above mentioned subject we are complies conditions all the information submitted vide letters dated 28.09.2008, 20.06.2008 & 30.03.2010 & presented during the meetings held on 22nd-24th august 2007, 22nd-23rd October 2008 & 25th – 26th February 2010 shall be complied, and enclosed as annexure XVI.

Thanking You,

Regards,
Angre Port Pvt Ltd.

Authorized Signatory,
Capt. Sandeep Gupta

Annexure – VI

Oil Spill Contingency Plan

OIL SPILL CONTINGENCY PLAN

ANGRÉ PORT
setting A standard !

Angre Port Private Limited

Table of Content- Oil Spill Contingency Plan

LIST OF APPENDIX

Chapter-1

Introduction

Contents

1. Introduction

M/s Angre Port Pvt. Ltd. is owned and managed by Goa-based Chowgule Group. Angre Port is located at Village Sande Lavgan, Post- Jaigad, Talula -District- Ratnagiri, aharashtra. The Project is spread over almost 30 acres and additional 40 acres (open plot –out of customs notified area) and is about 325 KM from Mumbai

Ports represent a complex interface, between land and sea, between human activities and the natural environment, and between different transport modes. Maritime transport, by its nature, gives rise to many hazardous situations including shipping accidents, such as collisions, grounding, and sinking, and accidents arising from handling and storage of dangerous goods, bulk chemicals, and hydrocarbons in ships bunkers.

Port areas usually have a large number and range of potentially hazardous activities going on in close proximity to each other. A shipping incident or Oil Spillage can seriously affect the land-based activities and the surrounding coastal areas.

Angre Port location is inside Jaigad Creek. An oil spill from a ship due to collision, grounding, sinking, bunkering operations, or any other reason in the port may well affect the surrounding community and environment.

Marine co-ordinates of the Port- Latitude – 17o 17’ N and 073o 14’ E

The purpose of this plan is to establish a framework for coordinated inters agencies and port community response to a significant oil spill incident occurring within the Angre Port Limit.

A “Significant Oil Spill” incident within port limits of Angre Port would pose unique challenges inter-departmentally and to responding agencies. It is therefore recognized that a coordinated crisis and consequence management Oil Spill Contingency Plan is required to provide an effective containment and recovery response.

The details of the Organization Chart of Angre Port are given in ***Appendix-01***

The main components of Angre Port are:

1. Navigational Channel
2. Jetty
3. Storage Yards
4. Warehouses
5. Molasses Tanks

The port has leased the land from Maharashtra Maritime Board (MMB), which has an office in Ratnagiri.

1.1 Directive

Government of

Maharashtra Directive

to Non-Major Ports

Under Jurisdiction of Maharashtra Maritime Board

Under the directive issued by the MARITIME STATES DEVELOPMENT COUNCIL (MSDC) to all coastal States that every Port under their jurisdiction must prepare a Contingency Plan for tackling Oil Spills in their respective Maritime Port Limits. Accordingly, all the ports on the coast of the State of Maharashtra operating under the Jurisdiction of the Maharashtra Maritime Board have been directed as per order no. MMB / CEO / Traffic / Development of Tier-1 Pollution response facility / 1478 dated 30th June 2010 to prepare Oil spill Contingency plan as per National Oil Spill Disaster Contingency Plan (NOS-DCP) for their respective ports and submit the same by 1st September 2010.

1.2 Objective:

- To save marine life and mitigate the suffering
- To minimize damage to the marine environment
- To minimize damage to human life and property
- To help maintain essential services
- To help the in the continuity of the Fishing trade
- To maintain high morale and avoid panic
- To restore normalcy of life as early as possible

Statement of Objective

A "Significant Oil Spill" incident within port limits of Angre Port would pose unique challenges inter-departmentally and to responding agencies. It is therefore recognized that a coordinated crisis and consequence management Oil Spill Contingency Plan is required to provide an effective containment and recovery response.

The purpose of this plan is to establish a framework for coordinated inters agencies and port community response to a significant oil spill incident occurring within the Angre Port Limit.

1.3. Basic Definitions:

1.	On-Site Plans	Address Incidents originating within the Port area.
2.	Off-Site Plans	Address incidents originating outside the port area but affecting the port operations or from port to outside.
3.	Risk	The chance of an adverse event occurring in some period of time or in specific circumstances, in the process of engaging in an activity.
4.	Hazard	A Phenomenon that may cause disruption to persons and their infrastructure and is an undesirable outcome in the process of engaging in an activity
5.	Disaster	An event that can cause immense danger and disruption to the (Port and its) infrastructure causing loss to lives and property.
6.	Emergency	Serious sudden situation or occurrence that happens unexpectedly and demands immediate action to correct or to protect lives and or property
7.	Crisis	The unstable situation of extreme danger may lead to the following elements; Surprise, Rapid flow of events, Lack of or insufficient information, internal conflict, and confusion.
8.	Disaster Management	Set of actions and processes designed to lessen disastrous effects before, During, and after a disaster.
9.	Preparedness	Measures were undertaken in advance to ensure that individuals and agencies will be ready to react, such as emergency plans, logistical support, resource, inventories, and emergency information and communication Systems.
10	Response	Those measures are under immediately after a disastrous or hazardous event has occurred and for a limited period of time thereafter, primarily to save human life, and property, treat the injured, prevent further injury and other forms of property loss, to mitigate disruption. They include response plan activation, declaration and communication of emergency to the concerned potential population and facilities at risk, opening and staffing of emergency operation centers, mobilization of resources, Issuance of warnings and directions, and provision of aid.

11	Mitigation	Those measures and activities are aimed at reducing or eliminating hazards or lessening the impact of the event.
12	Prevention	Mitigation of hazard effects through public education, early warning or detection systems, safety systems, building, and land-use codes and regulations.
13	Recovery	Those measures are undertaken to restore normal conditions. The time frame for recovery begins as soon as a reduction in critical response activities permits the allocation of resources and could include physical restoration, and reconstruction.
14	All clear	Direction is given by the incident coordinator (or authorized person) that, the emergency situation has been revoked and that there is no further damage.
15	Assembly Area's	On the decision of evacuation, the places where people will move first to an assembly area, where further instructions will be given.

1.4. Abbreviations

APPL	Angre Port Private Limited
MSDC	Maritime States Development Council
NOS-DCP	National Oil Spill Disaster Contingency Plan
ICG	Indian Coast Guard
SOPEP	Ship Board Oil Pollution Emergency Plan
DC	District Collector
DM	District Magistrate
SP	Superintendent of Police
MMD	Mercantile Marine Department
MMB	Maharashtra Maritime Board
OSR	Oil Spill Response
ERT	Emergency Response Team
CEO	Chief Executive Officer
SW	South West
IMD	Indian Metrological Department
PRO	Public Relation Officer
WSF	Water Soluble Fraction
PFSO	Port Facility Security Officer
IMO	International Maritime Organization
DMG	Disaster Management Group
CG	Coast Guard
INCOIS	Indian National Centre for Ocean Information Services
COP	Cargo Oil Pumps

1.5. Assumption

1. The arrangements already in place in relation to the containment of spills and contingency management adequately address state responsibilities in relation to responses and recovery from such incidents. This plan does not address consequence management responsibilities and arrangements.

2. In relation to mass warning and mass communications, a variety of technological systems will be progressively implemented to provide information to both the port community and the general population when required.

3. All owners, managers, and operators have sufficient trained and equipped personnel to perform the roles and responsibilities identified in the plans mainly associated with oil spill damages and consequences.

4. That stakeholder agencies have in place effective operational plans, standard operating procedures, or similar which detail the specific responses of that agency in support of the plan

5. Those stakeholder agencies have in place a redundancy plan to provide a response in the event that particular resources are unbelievable.

1.6. Oil Spill Policy:

- Prevention of accidental spillage from ships, port pipelines, and port crafts
- Well-planned and coordinated response to the spillage
- Trace, restrict, stop and achieve full containment of spillage
- Efficient and effective recovery and disposal
- Help early settlement of spillage claims

1.7. Health Safety Security Environment Policy:

APPL is committed to protecting and preventing occurrences of all types of negative impacts on the Marine ne Environment in close proximity to and around the port.

These impacts include Oil Spills that may accidentally occur from ships visiting the port of Jaigad. The Oil spill Management Plan is part of that commitment.

1.8. Port Limits & Geographic Boundaries:

The Jaigad area chart No.2105 published by Naval Hydrographer's office Dehradun, India comprises the channel markings and depths of Angre Port together with JSW Port as these two ports are located on the common waterfront of Jaigad Bay.

The coordinates setting out port limits of Angre Port and JSW Port are contained in a notice to this effect issued by the Maharashtra Maritime Board authority on 27th March 2015.

This Oil Spill contingency plan shall cover all the areas under the jurisdiction of APPL under the directive issued by MMB which will include exact coordinates of APPL port limits.

NOTIFICATION HOME DEPARTMENT

Madam Cama Marg, Hutatma Rajguru Chowk,

Mantralaya, Mumbai - 400 032, dated- 2012

INDIAN PORTS ACT, 1908

In exercise of the powers conferred by section 5 of the Indian Ports Act , 1908 (XV of 1908) and of all other powers enabling it in this behalf and in modification of the Government Notifications No. MPT 1092/CR-53/TRA-4, dated the 15th February 1996 and No. IPA 1298/CR- 107/PRT-1, dated the 5th January 2000, the Government of Maharashtra hereby, alters the existing limits of the port specified in column (2) of the Schedule hereto (being the port referred to in the Part X of the First Schedule to the said Act and being port to which the said Act extends) ; and declares the limits respectively specified against the said port in column(3) of the said Schedule to be the precise extent of limits thereof .

Serial No.	Name of Port	Limits under the Indian Ports Act, 1908
(1)	(2)	(3)
	3.	Angre Port Private Limited limits will be, all water bound by a line drawn from point north west of Jaigad Fort in position (A) Latitude 17° 18' 25" N, Longitude 73° 13' 14" E, thence north westward to the point (B) Latitude 17° 18' 37" N, Longitude 73° 13' 04" E, thence north westward to the point (C) Latitude 17° 18' 51" N, Longitude 73° 12' 49" E, thence north westward to the point (D) Latitude 17° 19' 03" N, Longitude 73° 12' 24" E, thence north westward to the point (E) Latitude 17° 19' 50" N, Longitude 73° 10' 08" E, thence eastward to the point (F2) Latitude 17° 19' 50" N, Longitude 73° 11' 53" E, thence south eastward to the point (G1) Latitude 17° 18' 18" N, Longitude 73° 14' 09" E, thence south westward to the point (H) Latitude 17° 17' 33" N, Longitude 73° 13' 48" E, thence eastward to the point (J) Latitude 17° 17' 30" N, Longitude 73° 14' 09" E, thence north eastward to the point (K) Latitude 17° 17' 42" N, Longitude 73° 15' 00" E, thence southward to the point (M) Latitude 17° 16' 50" N, Longitude 73° 14' 58" E, from here to the north along the coast, including 50 yards landwards from High Water Mark up to the point (A) Latitude 17° 18' 25" N, Longitude 73° 13' 14" E, excluding MMB jetty, within these limits free navigational passage for all local fishing and non fishing vessels.

By order and in the name of the Governor of Maharashtra.

A. S. Gharge
Deputy Secretary to Government.

The Navigational Chart for Angre Port is Chart No-2005 and the same is placed in Appendix 1. The area of responsibility is within the limits of the Angre Port

- Area – Jaigad, Ratnagiri
- Co-Ordinates - Latitude – 17^{O} 17' N and 073^{O} 14' E
- Maximum Draft- 10 Mtrs
- Current- Up to 2.5 Knot
- Swell – Up to 2.5 Mtrs.
- Tide Range – 2.6 Mtrs.

- Weather – Fair, Fully sheltered & and all-weather operational. (Monsoon South
- West Monsoon from May-end to End of Mid- September)
- Category- Unrestricted
- Jetty- Finger Type
- Berth – 4 nos.
- Cargo- Bulk, Break-bulk, Project Cargo, Liquid & Live Stock, etc.
- Max. Size of Vessels- 250 Mtrs L X 32 Mtrs B
- Restriction – Vessels that are not maintained in good order are refused entry to the Port.

The details of Port Layout is given in ***Appendix-02***

1.9. Arrival and Port Navigations:

- Berth Location - Latitude- 17° 17’ (N) and Longitude- 073° 14’ (E)
- Designated Anchorage- Latitude-17° 20.54’ (N) and Longitude- 073° 09.17’ (E)

  Latitude-17° 19.82' (N) and Longitude- 073° 09.17' (E)

  Latitude-17° 20.54’ (N) and Longitude- 073° 10.90’ (E)

  Latitude-17° 19.82' (N) and Longitude 073° 10.90' (E)

(Vessels are not allowed to anchor outside these areas without the permission of the Terminal Head/ Marine Head.)

The Channel length is 6500m X 160m with a diameter of a turning circle is 500m. Any spill incident in the channel and anchorage will also fall under the responsibility jurisdiction of the port. Spills originated in the port limits and going out of the port limits will still be the port’s responsibility.

The details of the Navigational Chart are given in ***Appendix-03***

Chapter-2

Authorities and Responsibilities

Contents

2. Authorities and Responsibilities

Angre Port has authorized the authorities and responsibilities, as below:

1. HOD Marine will carry out the duties of the Incident Controller and will head the Emergency Control team.

2. Manager F&S will be the on-scene commander and will look after all the tactical aspects of oil spill response, both onshore as well as offshore. However, there will be a separate in-charge for the onshore response team.

3. The emergency control team will be located in the marine (jetty) Control room.

4. The Emergency Control Team will be picked up from different departments as per availability, mostly from marine, security, and firefighting; and they can be trained accordingly.

5. Immediate response will be the responsibility of the nearest operating unit. Both the offshore and onshore emergency teams are needed, as it is impossible to know whether the spill on the water surface will reach the shore or not.

I. <u>Offshore Response Team Comprise of:</u>

a. On Scene Commander (OSC)

b. Offshore Emergency Response Team- 6 Persons

c. Master of Vessel and its Crew.

II. <u>Onshore Response Team Comprise of:</u>

a. On-scene Commander

b. On Shore Emergency Response Team- 4 Persons

c. Sufficient Numbers of Support Staff – 10 Nos.

2.1. Coordination Committee:

All the senior officers of different departments from the coordination committee the committee is headed by HOD Marine and the members are from those departments, which have a direct bearing on Oil Spill Response Operations. HOD Marine, being the Incident Controller, will report the OSR activates to the Angre Port unit Head, who is the overall in charge of the local administration. The committee members are the same as Angre Port.

a. Incident Commander- HOD Marine
b. On Scene Commander- Manager F&S
c. Technical Advisor- HOD Civil
d. HSE Coordinator- HOD- HSE
e. Security Coordinator- HOD- Security/PFSO
f. Logistics Coordinator- HOD- Logistics
g. Media and Welfare Coordinator- HOD-HR & Admin

2.2. Statutory Requirements:

The Navigational Safety in the Ports Committee of Govt. of India, headed by DG Shipping and the Indian Coast Guard's National Oil Spill Disaster Contingency Plan (NOS DCP) 2015 makes OSCP mandatory for all oil companies, ports, and oil handling facilities. As per these directives.

The plan has been made as per guidelines on Contingency Planning provider by:

- NOS DCP, 2015 of Indian Coast Guard
- International Maritime Organization (IMO)

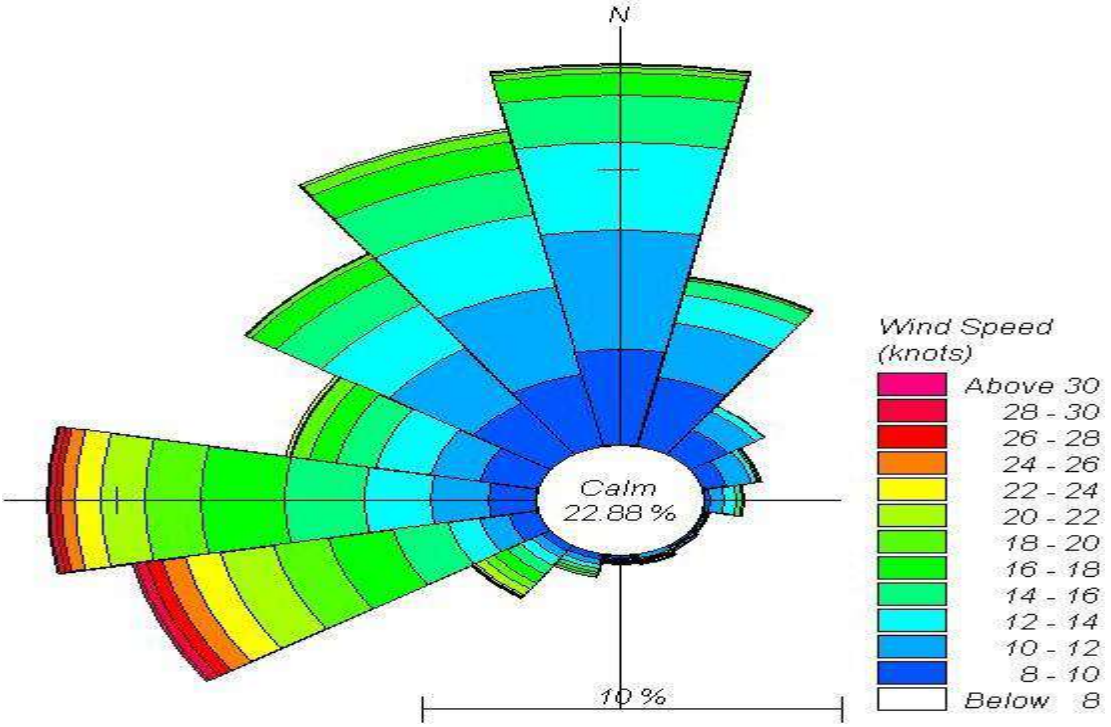
In addition, the details on shoreline clean-up in tropical weather has been taken from National Oceanic Atmospheric (NOAA) guidelines and option for shore clean-up & separation and disposal of oil & debris.

2.3. Weather Conditions:

A. Wind:

The Most prominent wind direction is north having speed in the range of 10 to 18 knots most of the time. West and west southwest showed the maximum wind speed of about 28 knots, which are prevalent during monsoon months representing

the southwest monsoon. The extreme wind outside the southwest monsoon is more likely to occur in the period October to December than at any other time of the year.



Wind speed rose

B. Cyclones:

Severe tropical storms and cyclones can occur on this coast at a frequency of about one every 5 to 10 years. These mostly travel from the East across the Indian continent.

C. Tidal Height

The information on tidal levels for Jaigad, (Lat. 170 17' N, Long. 730 10' E) is mentioned on the Naval Hydrographic Chart 2105, with reference to the datum of soundings, as given below.

Tidal Level	Heights in meters above datum
MHWS	+ 2.80 M
MHWN	+ 2.20 M
MLWN	+ 1.30 M
MLWS	+ 0.80 M

MSL	+ 1.80 M

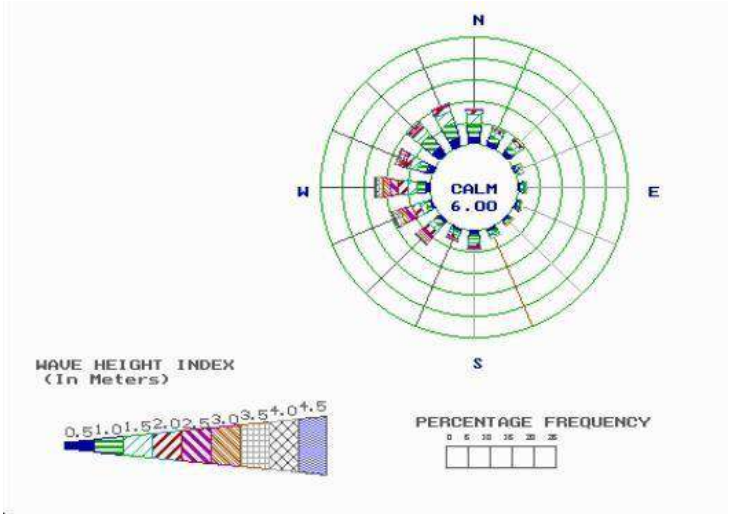
D. Tidal Current

The Naval Hydrographic Chart suggests that the offshore currents are primarily affected by monsoon and are aligned along the coastline. Between December and January, the currents are mostly northwesterly with a maximum magnitude of 0.25 m/s. In July and August when the monsoon is well established, south-easterly currents up to 0.5 m/s are experienced.

E. Wave

The wave data reported by the India meteorological department (IMD) during the period 1968-to 2001 were considered. The frequency distribution analysis of the offshore wave data for seasonal and annual periods was carried out.

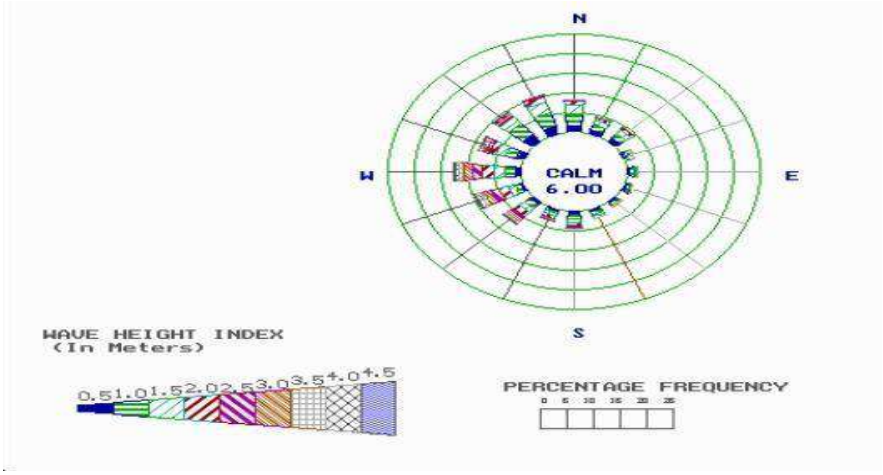
- The state of the sea is generally rough with an occasional heavy swell. Non-Monsoon Average – Wave Height 0.5 to 1.5m, and wave period 10 sec-13 sec.



Annual wave height rose diagram of Jaigad

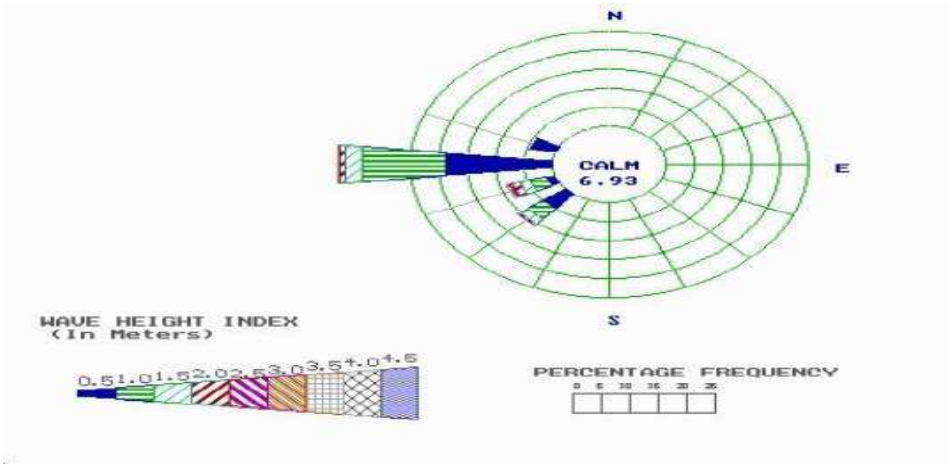
F. Wave Clement

The wave data reported by the India Meteorological Department (IMD) during the period of 1968- 2001 were considered. The frequency distribution analysis of the offshore wave data for seasonal and annual periods was carried out. Typically, Fig. 2.3 shows the offshore annual wave rose diagram.



Wave Rose Diagram at Jaigad For SW Monsoon (Jun – Sept)

This deep water wave data was transformed by OUTRAY model to get the seasonal and annual nearshore wave climate near the Angre port at Jaigad. The seasonal wave rose diagrams for Jaigad Bay are shown in Figures 2.4 to 2.6. During the monsoon period (June to September) wave heights are less than 3 m for 70% and less than 5 m for 97% of the time. Owing to its geographical orientation, Damankul Bay is well protected from the south-west and to some extent from the west, by the Jaigad Head, which forms a natural breakwater against waves from these directions. This region, however, is most susceptible to the waves from the WNW direction.



Wave Rose Diagram at Jaigad for Non-Monsoon (Feb – May)

2.4. Interface With ROSDP & NOSDPC:

This Plan is to be read in conjunction with the Coast Guard national and regional plans. This plan is interfaced with disaster management plans of the port so that

the same manpower or team is delegated for all emergency work. However, it must be realized that this contingency plan has both land as well as water operations. Tug Boats and other watercraft will be utilized in the plan.

A. Levels of Response

As Per international practice, oil pollution preparedness and response requirements are categorized into three "Tiers". The tiered approach to oil contingency planning identified resources for responding to different sizes of spill, distance, complexity, and effect on the surrounding over which the response is coordinated. The NOSDCP recognizes three levels of tired response.

Tier -1 (Within Local Level)

Tier 1 spills are generally small in size, affect only a local area, and may be dealt with by the individual operator. Indian Coast Guard and Ministry of Shipping have identified ports and oil handling organizations in certain categories and they have been given a list of equipment, manpower, and logistics to maintain.

1. Mobilization of oil spill equipment and OSR team oil response tug and ERT personnel from shore/jetty to one of the vessels will take roughly 15 minutes.

2. Response equipment stored in a container on the tug/vessel will take hardly 320 minutes for mobilization and deployment of the coastline, where the spill might hit land.

Tier -2 (Beyond Local Capability)

Tier 2 is concerned with preparedness and response to a spill that requires the coordination of more than one source of equipment and personnel. 'Tier 2' describes a wide range of spill sizes and potential scenarios response assistance for which can come from entities within a port area or from national sources outside the immediate geographic area.

1. Mobilization of Coast Guard Air Efforts will take about 2 hrs. from Mumbai, (Fixed wind aircraft for monitoring of spill movement, if required)

2. Mobilization of oil spill response equipment onboard a Coast Guard Vessel from Mumbai or Mangalore will require about 10-15 hours.

Tier -3 (Beyond national resources)

Tier 3 is concerned with a major spill requiring the mobilization of all available

national resources and depending upon the circumstances, will likely involve the mobilization of regional and international systems. It is this tier of response where positive advance customs arrangements are critical to facilitate a successful effort. International resources will be facilitated by the statutory Agency through the Ministry of External Affairs.

2.5. Document Control:

This document from an integral of the ERDMP of Angre Port is a controlled document to which no unauthorized amendments or revisions can be made.
All amendments and revisions must be carried out in line with the Documents Control Procedure laid down in the Documents Control and Distribution Procedure of Angre Port.

- **Holder of OSCP Manuals Should**

  - Keep the OSCP current by ensuring that all revisions are appropriately filed.
  - Study the OSCP, and its revisions and incorporate the same into work practices.
  - Suggest changes and submit text for changes so as to improve the quality of line OSCP.

OSCP Document Distribution

Sr. No.	Document Holder	Format
1	Port Head	Soft Copy
2	HOD- Operations	Soft Copy
3	HOD/PFSO - Security	Soft Copy
4	HOD- HR	Soft Copy
5	HOD- Fire & Safety	Soft Copy
6	HOD- Marine	Soft Copy
7	Emergency Control Team (ECT) Members	Soft Copy
8	Emergency Control Room (ECR)	Soft Copy
9	Reserves	Online

As per the provisions of NOSDCP, this OSCP will be vetted by the Indian Coast Guard before distribution.

Chapter-3

Risk Assessment

Contents

3. Risk Assessment:

Criteria for emergency classification, risk assessment, and management of oil spill for on-site and off-site plans covering all tiers from I to III

Any Oil Spill Contingency Plan needs the risk in the port to be analyzed and preparations made accordingly. However, in India, the Coast Guard and Ministry of Shipping have categorized ports and establishments and the preparedness planning is to make accordingly.

Special Note:

- Sources A, C, D, & F are not applicable to Angre Port Oil Spill Contingency Plan as it has no Liquid Bulk, Chemical, Gas, or POL handling infrastructure and terminal.

- Sources B, E, G, H, I & J are presently covered in this Oil Spill Contingency Plan.

Hence the equipment procurement and the manpower are being planned accordingly.

The Shoreline:

For the preparation of the OSCP and analysis of the risk, the team met with the local authorities to get the knowledge about the local area and their suggestions and concerns about the marine life and the effect of the oil spill in the area under Angre Port jurisdiction. Apart from the concerned area, the team discussed with the authorities the adjoining area too.

Jaigad is a small township with a fishing jetty mostly used by the sea going fishing craft. The shoreline in the vicinity of the Jaigarh headland along the West coast of India is generally rocky and fronts an elevated plateau, with levels going up to 40 - 90 m. The slopes are steep and almost vertical. The shoreline of the bay is generally in the east-west direction and is fringed with laterite rocky outcrops. An examination of the high water line from the hydrographic and topographic charts for the past 40 years indicates that the shoreline is quite stable, with little or no littoral drift. In addition, the available satellite imageries were also analyzed and it was ascertained that the shoreline exhibits long-term stability.

The outfall of the Shastri estuary at Jaigad is located at about 225 km south of Mumbai at latitude N 17019’ and longitude E 73012’. The Shastri estuary has an entrance width of about 3.5 km with a meandering course in the upstream. The total length of the Shastri River is about 64 km. The peak freshwater flow in the Shastri River is estimated to be about 2850 cumec. The upstream reaches of the river are shallow with sand bars and embayment along the southern bank.

The general depths at the entrance of the Shastri River estuary decrease from 10 m at the western edge of the headland to 5 m at the eastern end where there is a sand bar having minimum depths of about 2 m or so. A little further east, in the deep channel, along the Jaigad head, one finds depths again in excess of 10 m, as a result of the monsoon discharge and the tidal prism of the Shastri River discharging in to the Jaigad Bay. The 10 m contour on the western side is about 500 m and 15 m contour about 4 km from the shoreline. Rock outcrops at the edge of the coastline, covered with water with tidal phase.

The Angre port and Lavgan shipyard near Lavgan village is about 6 km from the Jaigad Head, inside the mouth of the Shastri River. The depths in the approaches to Lavgan are as much as 10 to 16 m, reducing to about 7 m at the proposed shipyard. There is a channel hugging the opposite bank at the proposed site with depths of about 9 m below Chartdatum. The key feature of this area is the presence of the sand bar known as Mora Sands near Tavsal village, which appears to be pushing the deep channel of the river against the incredible Jaigadh Headland, resulting in the very deep and narrow channel in a reach of 2.0 km, where currents could be strong.

Tides in the estuary are semi-diurnal with pronounced inequality in successive tidal cycles. The mean spring tidal range is 2.2m–2.8m and the mean neap tidal range is 0.6m–1.4m. The Dhamankhol Bay and the region up to the sand bar are exposed to the incident waves from North to Northwest directions during the non-monsoon season and to the westerly waves during the southwest monsoon season. The Jaigad head provides protection against the incident of southwesterly waves during the monsoon season. The estuary portion upstream of the sand bar is naturally protected against the waves. In the open sea, the soil mainly consists of silt material and in the river portion, it is silty sand.

3.1 Oil Spill In Port:

An oil spill can occur due to the following infrastructure and operational failures.

S. No	Source
A.	As a result of leakage from cargo pipelines/tanks of tankers and liquid bulk carriers (Applicable to liquid bulk terminals in the port)
B.	As a result of a cross overflow of bunkers fuel tanks during loading/unloading trim requirements or bunkering operations or oil transfer of fuel on onboard or correction of list. (applicable to all ports)
C.	As a result of leakage from shore pipelines, loading arms or bursting of flexible hoses at the tanker jetty. (Applicable to liquid bulk terminals in the port)

D.	As a result of overflow and leakages from shore or ship manifolds and drip drains. (Applicable to tanker terminals in the port)
E.	As a result of grounding, collision and foundering of ships at anchorage or berths in the port.
F.	As a result of fire and explosion on tankers at anchorage or berths. (Applicable to tanker terminals in the port)
G.	As a result of fire and explosion on any other ship at anchorage or at berth. (Applicable to all ports)
H.	As a result of leakages inshore oil tank farms of the port. (Applicable to tanker terminals and bunkering facility in the port)
I.	As a result of leakage from any type of substandard vessel or damaged vessel taking refuge in the port after a mishap at sea. (Applicable to all ports)
J.	As a result of accidental or deliberate pumping of oil bilges operation carried out by the ship in port at berth or at anchorage. (Applicable to all ports)

Special Note:

- Sources A, C, D & F are not applicable to Angre Port Oil Spill Contingency Plan as it has no Liquid Bulk, Chemical, Gas or POL handling infrastructure and terminals.
- Sources B, E, G, H, I & J are presently covered in this Oil Spill Contingency Plan.

3.2 Oil Spill Alert:

- Master of the ship will raise an alarm by blowing four long blasts from ship's whistle / siren each of 10 seconds duration at interval of 5 seconds and repeat this signal at least three times.
- Master of the ship shall inform Port Control of Angre Port through Port Control (on VHF Channels - 14 & 16) giving details of oil spill and the type of the help required.
- Pilots on board the other ship, Masters of the other ships in port, security staff of ISPS boats, Forest department boats, Customs & Coast Guard boats or any fishing boats in the vicinity shall inform the Angre Port Control Station about the oil spill noticed by them on VHF Channels 14 & 16 or by cell phone +919373162069.
- Port Control shall inform Port Head, PFSO, Fire & Safety Head, Marine Head, Jaigad Port Office, Tugs on Duty, Duty Pilots and Coast Guard Headquarters

no. 7 Port Control shall hoist following day and night signals signifying oil spill in the port.

a. By day (sunrise to sunset) International Code Flag Signal "I" (India) over Flag Signal "T" (Tango) in a vertical line

b. By night (sunset to sunrise) 2 red lights one above the other visible all around for a distance of 2 nautical miles.

A. On-site Plan

Table of Participation

The following table shows the participation of various authorities in dealing with an oil spill at different Tier levels and sharing the Contingency resources.

Oil Spill Risk Assessment	Tier 0	Tier I	Tier- II	Tier- III
Risk Level	Negligible	Marginal	Critical	Catastrophic
Oil Spill Quantity Level	< 1 Ton	1-10 MT	10-1000 MT	1000-10,0000 MT
Resources Required	Port Resource Only	Port Resources & Facilities	Port + Indian Coast Guard Facilities	Port + ICG + National & International Support
Effect of Oil Spill	Around the berth or Ship only	Localized within Port Dock Area	Port Limits	Port Limits and adjacent Areas
Loss of life	Nil	Nil	1-5 Persons	More than 5 Persons

Sequence to On-Site Plan

1. Report received by Port Control directly from discoverer of Oil Spill or the

tanker that has caused it.

2. The report is received on VHF marine bands 14 & 16.

3. Port Control informs Port Head about the Oil Spill.

4. Port Head musters the action group as per On-Site Plan & assesses the level of the spill.

5. If the spill is up to level 1 the port and the ship make combined sustained efforts to control and contingency the spill.

6. If the spill level no 1 is crossed then Port Head informs APPL Off-Site Plan team and advises them to seek State and National assistance to control the spill.

7. APPL Off-Site team informs Coast Guard Headquarters to take over from port action group if level no 1 is crossed and spill comes to level no 2(Tier-II)

8. APPL team continues to monitor the situation through an action group at the site and keeps informed State Government of Maharashtra through District Magistrate or District Collector Jaigad.

The details of the On-Site Plan Chart is given in ***Appendix-04***

B. The Shoreline:

Jaigad is a small township with a fishing jetty mostly used by the sea going fishing craft. The shoreline in the vicinity of the Jaigarh headland along the West coast of India is generally rocky and fronts an elevated plateau, with levels going up to 40 - 90 m. The slopes are steep and almost vertical. The shoreline of the bay is generally in the east-west direction and is fringed with laterite rocky outcrops. An examination of the high water line from the hydrographic and topographic charts for the past 40 years indicates that the shoreline is quite stable, with little or no littoral drift. In addition, the available satellite imageries were also analyzed and it was ascertained that the shoreline exhibits long-term stability.

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River is estimated to be about 2850 cumec. The upstream reaches of the river are shallow with sand bars and embayment along the southern bank.

The general depths at the entrance of the Shastri River estuary decrease from 10 m at the western edge of the headland to 5 m at the eastern end where there is a sand bar having minimum depths of about 2 m or so. A little further east, in the deep channel, along with the Jaigad head, one finds depths again in excess of 10 m, as a result of the monsoon discharge and the tidal prism of the Shastri River discharging in to the Jaigadh Bay. The 10 m contour on the western side is about 500 m and 15 m contour about 4 km from the shoreline. Rock outcrops at the edge of the coastline, are covered with water with the tidal phase.

The Angre port and Lavgan shipyard near Lavgan village is about 6 km from the Jaigad Head, inside the mouth of the Shastri River. The depths in the approaches to Lavgan are as much as 10 to 16 m, reducing to about 7 m at the proposed shipyard. There is a channel hugging the opposite bank at the proposed site with depths of about 9 m below Chart Datum. The key feature of this area is the presence of the sand bar known as Mora Sands near Tavsal village, which appears to be pushing the deep channel of the river against the in erodible Jaigadh Headland, resulting in the very deep and narrow channel in a reach of 2.0 km, where currents could be strong.

Tides in the estuary are semi diurnal with pronounced inequality in successive tidal cycles. The mean spring tidal range is 2.2m–2.8m and mean neap tidal range is 0.6m–1.4m. The Dhamankhol Bay and the region up to the sand bar are exposed to the incident waves from North to Northwest directions during the non-monsoon season and to the westerly waves during the southwest monsoon season. The Jaigad head provides protection against the incident southwesterly waves during the monsoon season. The estuary portion upstream of the sand bar is naturally protected against the waves. In the open sea the soil mainly consists of silt material and in the river portion, it is silty-sand.

3.3 Action by Ship:

A. Immediate Action:

- Sound emergency alarm

- Initiate vessel response plan

B. Initial response on board the ship:

- Cease all-cargo operations/bunkering operations
- The close manifold valve on board and shut off COP

C. Secondary Response:

- Locate Source of Leakage:
- Start emergency operations and take measures to arrest the spill.
- Start transferring oil to empty tanks in case of overflow.
- Start clean-up operations on board.
- Check scupper plugs for tightness.
- Relieve pressure on relevant sections of pipelines
- Assess fire risk from the release of flammable substances.
- Judge health hazards from toxic substances due to spills
- Man fire stations on deck if necessary.

D. Further Response:

- Stop air intake into accommodation/engine room.
- If required change the vessel's trim.
- Contain spill with pollution equipment available on the vessel.
- Close all entry doors to the accommodation.
- Keep the engine on standby.

- Disconnect loading arms/bunkering lines.
- Transfer deck washings into slop tank.
- Any spill residues collected in the final clean-up are stored up safely for disposal.
- In case a vessel is grounding she shall display international signals for day and night and give her exact position to the port signal.
- In a vessel anchored to avoid drifting and is not under command, she shall display appropriate international signals for day and night and continuously give her position to port control.
- Master will take all precautions as a prudent seaman against marine pollution as per IMO regulations bearing in mind that mobilization of any type of assistance expected from the port authorities may take the time she shall therefore frequently assess the overall situation and keep informing the port head through control.

E. Official Report on Oil Spill from Master:

- The master of the ship shall submit the oil spill report to the port head signed and stamped with the vessel's official seal.

The details of the Official Report Format of Oil Spill from Master are given in ***Appendix-05***

3.4 Oil Spill Modeling:

A number of models have been developed to simulate weathering processes and forecast the fate of oil once spilled. The models follow a number of different approaches. They can range from a simple vector calculation to sophisticated computer models of the movement and distribution of the oil in three dimensions along with predictions of the change in properties as the oil weathers.

To model the movement of oil, the most important input parameters include the type, and quantity of oil spilled, along with the rate of release. Key environmental input data include wind strength and direction, ocean currents, tides and air and sea temperatures. Accuracy and availability of this data can often be an issue. Models are widely used for contingency planning where they can be particularly helpful for decision makers. By modelling a series of the most likely oil spill scenarios, decisions concerning suitable response measures and strategic locations for stockpiling equipment and materials can be made. The locations shown to be

the most vulnerable can be identified, the logistics of responding to these locations studied and response equipment placed accordingly.

Spill response training is another activity that makes use of oil spill models to allow trainees to react to simulated spill scenarios with varying circumstances. Effective use of models during an actual emergency response can be more challenging. This is because it requires numerous input parameters, for which data may not be readily available at short notice. Usually the oil release occurs immediately after an incident. Information such as the oil type or the quantities involved may not be known. As the incident develops, more accurate data will improve the output of the model. Although models cannot precisely predict the changes oil undergoes, they can indicate whether oil is likely to dissipate naturally or whether it is likely to reach the shoreline. This information can be used by spill responders to decide on the scope of initial aerial surveillance flights and/or the most effective spill response techniques to employ within the optimum timeframe. It is important to keep in mind that models have their limitations and are no substitute for real observations (eg aerial surveillance, shoreline survey).

3.5. Tracking Spill Movement:

ECT would calculate and estimate the position of the slick in 24 / 48 & 72 hours by continuous plotting of the position of the oil slick on the chart and keep informing the Emergency Response Team of the current as well as predicted position of the oil slick on water.

Tracking of the oil spill is done by the software. We need to fill in the estimate quantity of spilled oil, Type of Oil. This software shows the predicted movement of the slick and estimated time of dispersing. Angre Port is registered with INCOIS for their advisory on Oil Spill. INCOIS provides real time data on the movement of Oil by taking into consideration current, wind direction and speed.

As time passes by, in addition to the surface drift due to wind and sea currents, as oil spill undergoes a variety of complex physical, chemical and biological processes, which gives rise to changes in the properties of the oil spilled. The important mass transport or weathering processes are:

I. Spreading:

Spreading of oil is one of the least predictable aspects of spill behavior except that it will generally be rapid. The rate of spreading depends on a large number of interrelated factors, that include the thickness of oil slick characteristics of the oil, Wax content, Viscosity, Presence of natural surface-activate compounds, Pour Point and Boiling Point range, Sea state, and weather. The volume of spill /Rate of the

spill – Large, instantaneous spill will spread out faster. Spreading would be rapid and dominant initially; thereafter it gradually decreases and finally stops. It may take 01 to 10 days. The spreading oil breaks up and forms "Windrows" parallel to the wind direction.

II. Dispersion:

All oil will mix into the water column as a result of wave action. It is generally limited to the surface and the first few meters below. In very rough seas dispersion can remove a significant proportion of oil or oily emulsion from the sea surface.

III. Evaporation:

Volatile fractions of oil will evaporate for (low specific gravity) low viscosity oil. Evaporation is the most significant factor in the loss of hydrocarbons from an oil slick, and may range from 75% loss for light fuel oils down to less than 10% for heavy oils. The higher the wind speed and ambient temperature, greater the rate of evaporation. A high wax content in oils tends to suppress the evaporation loss due to a consequent inhibition of the amount of spreading that occurs. Wax tends to raise the Pour Point of the oil and so high wax oils tend to be viscous, semisolid or even solid at normal sea temperature.

IV. Emulsification:

Some oils will form water-in-oil emulsions if enough mixing energy is applied. Generally, these oils have high specific gravity, high asphalting content and moderate Pour Point. The emulsion formed may consist of up to 80% water by volume. Therefore the volume of some slicks may eventually exceed that of the oil spilled, despite the loss of light oil components through evaporation. In calm waters little or no emulsification occur. The emulsion few Hours forms within a F with low viscosity oils, whereas it may take several days with viscous oils. It is often referred to as "Chocolate Mousse" because of its color and consistency.

Oil emulsions have elevated viscosity relative to the oils themselves and this has implications for oil spill management and the onshore behavior of the oil slick. Asphaltenes, together with moderate wax content, tend to facilitate the formation of a stable emulsion. The "Chocolate Mousse" may sink if it becomes denser than the seawater. Under wave action, the emulsion remains relatively fluid but tends to get stiff when resting still on a beach or on still water.

V. Dissolution:

Many of the light components in oils are relatively soluble and can be dissolved in seawater as a result of wave action. The nature and amount of this "Water Soluble Fraction" (WSF) varies according to oil type. 'Heavy Oils' tend to lose little by dissolution due to the low amount of light hydrocarbons.

VI. Oxidation:

Oxidation occurs when oil is exposed to air. Rapidly spreading (low viscosity) oils are most amenable to oxidation. Ultraviolet rays facilitate oxidation and the term 'Photo- oxidation' is often used to describe the process.

VII. Sinking:

Very few oils will weather to such an extent that their specific gravity will exceed that of seawater. If this does occur, the oil may sink to the sea bottom, or into the water column.

VIII. Bio degradation:

Bio degradation refers to the breakdown of hydrocarbons by bacteria, which use the hydrocarbons as food source. The rate of this degradation depends on a number of factors including:

The availability of nutrients suitable for bacterial metabolism (primary Nitrate/ammonia and phosphate) ambient temperature, Oxygen concentration, Chemical characteristics of the oil, Physical character of the oil etc. The process of the bio degradation of the spilled oil is enhanced in the Tropics preferably due to elevated temperatures. The main physical properties that decides the fate of oil spilled at sea are specific gravity, distillation characteristics, Viscosity and pour point. Specific gravity of oil is its density in relation to pure water.

Chapter-4

Containment & Control
Contents

4 Containment & Control

4. Containment & Control:

- Upon receipt of the message from the port control, port head shall order duty pilot/ pollution control officer to proceed to the place of occurrence by launch/road.
- Port Head shall rush to Port Control to co-ordinate with Master and Duty Pilot to take appropriate actions like stopping pumping operations, slacking the tanks, relieve the pressure on pipelines, locking the scuppers to prevent further

pollution.

- Duty Pilot shall inspect various areas of the vessel, jetty and harbor to ensure no pollutant further discharges in the water after initial spill.
- Duty Pilot shall inform Port Head the extent of pollution and the situation report in terms of Tier Level.
- Marine Head shall seek assistance from Marine Engineers available on the tugs in the port for blanking, plugging leakage on the pipelines or any other repairs required to control the spills.
- Marine Head will arrange for deployment of containment boom, and other pollution control equipment available on tugs and boats to avoid further spreading of the spill.
- Port Head shall arrange to obtain latest weather reports, wind and current direction and plan strategy to contain and avoid spreading of oil slick.
- Port Head shall mobilize all the support from Coast Guard authorities if the Tier Level crosses to Tier-II.
- Port Head shall mobilize support from Jaigad local authorities through the good offices of the District Collector if required.
- Port Security and Fire Personnel along with duty tugs to remain on standby with foam to fight fire due to pollution.
- No hot work shall be carried out at the pollution site.
- Port Head will inform all local and private city hospitals as well as Government Hospitals for mobilizing first aid support in ambulances.
- Port Head shall restrict or stop shipping operations around the pollution site as the situation demands.

The details of oil spill report formats are given in ***Appendix-05***

4.1. Off-Site Plan:

- The APPL off-site plan team contacts DC or DM or SP and conveys the escalation of the spill from Level I to Level II and requests for State Government help and participation.

- The State Government of Maharashtra, crisis management team takes over the overall response through Coast Guard intervention and keeps the National crisis management group informed about the Oil Spill control and containment.
- National Disaster Management group keeps in close touch with the State Government and monitors the situation and in case of need triggers the International response for expertise and equipment to control and Containment of Spill.

The details of the Off-Site Plan Report are given in ***Appendix-06***

Oil Spill Risk Assessment	**Tier-0**	**Tier-I**	**Tier-II**	**Tier-III**
Risk Level	Negligible	Marginal	Critical	Catastrophic
Oil Spill Quantity Levels	<1 ton	1-10 MT	10-1000 MT	1000-10,000 MT
Resources Required	Port Resources	Port Resources & Mutual Aid Facilities	Port + Mutual Aid + Coast Guard Facilities + State Government Resources	Port + Mutual Aid + Coast Guard + State Government + Central Government Support
Chemical Properties ofSpill	Flammable ph 6-7 inert	Flash pt 23^0 C ph 4-6 or 8-10	Flash pt 18^0 C ph 2-4 or 10-12	Flash pt 18^0 C explosive-spontaneous combustion
Disruption	<1day	Few days	>1month	Wide Spread
Monetary Damage (Present	<Rs. 1,00,000	Rs. 1,00,000	Rs. 1-10 million	>Rs. 10 million

Scale)				
Utilization of Resources	Minimum	On-Site Sampling, Evaluation & Cleaning	On-Site Monitoring & Local Contractors	24hrs Monitoring Specialized Resources of Central Government
Eco-System Damage	Slight	Temporary	Moderate	Ir-reversible
Legal Liability	Low	Moderate	Light	Very High
Port / State / Central Government Interest	Port	Port + State	State Government	Central Government
Media Coverage	None	Local Press	State + Central Government Agencies & National TV Channels	National Press & TV Networks

Table of Participation

The following table shows the participation of various authorities in dealing with an oil spill at Tier-II & III levels and sharing the Contingency Resources.

Tier-II	State Government	Ship + Port + State Authority
Tier-III	Central Government	Ship + Port + State + Central Authority

4.2. Identification of Activities and Risks:

The risk of the oil spill in the port is negligible due to various facts like SOP to safe navigation permits only one vessel in the channel at any given point of time and embarking of a pilot is essential. Proper navigation and tugs are followed in ships' movement and ship handling. The sea bed is all clay and sand and no rocky structure is observed. Hence even ship is grounded, there are very remote chances of ship damage and oil spill, as a result of the hull rupture due to rocks. Despite all these, the spills cannot be ruled out completely, hence, the following reasons for the oil spill can be taken into consideration:

a. Fire explosion in the engine room/fuel tank when the ship is berthed alongside.
b. Tugs machinery failure leads to grounding or collision with another vessel or berth or the tug.

c. Unprofessional handling of the ship by the pilot/master of the tug, leading to a collision with the ship berthed alongside or with the berth itself.

d. Parting of mooring/berthing ropes.

Tugs and pilots are available for vessel movement. The details of vessels/tugs operating from this port are given in ***Appendix-07***

4.3. Spill Scenarios:

The spill scenario has been looked into from two different angels

1. At the Angre Port Jetty by hitting the jetty in rough weather

2. At jetty while bunkering.

4.4. Qualification of Spill

The main potential sources and possible quantities of oil likely to enter the environment from the Angre Port operations are summarized in the table below, however, spill response in manpower, equipment, and logistics is as per the MoS circular.

Spill Scenarios

Source of Spill	Oil Type	Possible Volume	Risk
Vessel Grounding	Fuel Oil	Less than 100 tones	Low
Fuelling of Tugs	HSD	Less than one ton	Medium
The collision between cargo vessels	HSD/Products	Up to 2500 tones	Low
Terrorism/Sabotage	HSD/Naphtha	Up to 2500 tones	Low

4.5. Types of oil likely to be spilled

The type of oil carried by the vessels as a bunker and likely to be spilled:

a. Heavy Fuel Oil
b. DO/HSD

Chances of any other type of oil gets spilled due to any other reasons are considered very remote, as they may not be in use in a significant quantity.
Bunkering of HSD is carried out only for the Tugs and other harbor crafts. This is on an average of 30 KL per tug per month, and other craft 5 KL per month. No bunkering of heavy fuel oil is allowed in this port. Any spill of this oil, which is carried onboard as a bunker, maybe due to serve as an accident only, the probability of which is very low.

4.6. Probable Fate of Spilled Oil

The chances of furnace oil getting spilled in Jaigad harbor are very low. But if it takes place, it will highly disastrous. The spill of HSD is more likely, and this will be a small quantity of a maximum 1 ton while bunkering by tanker truck, and the consequence will be less damaging to sensitive areas. Since HSD is volatile it would evaporate very quickly from the water surface.

4.7 Development of Oil Spill Scenarios:

The hazard/chance scenarios capable of resulting in an oil spill, present in the port, are discussed below:

A. Grounding:

This hazard may occur due to different scenarios, some of which are explained

below:

1. Equipment Failure-

This results in a situation when the vessel is not under the control of the crew and starts moving with the current and wind. In the confined water, channel, or while negotiating bends/ turns or approaching berth, etc. this can result in dangerous consequences. An example is the Steering gear breaking down and subsequently, the wheel not responding, Rudder getting stuck, the Main Engine tripping off due to a technical problem, the Fuel pump malfunctioning, Generator not taking load due to technical issues like earthling/short-circuiting and subsequently tripping off, The Main engine not stopping due to speed governor malfunctioning, etc.

2. Bad Weather-

Unusually strong winds with low visibility coupled with squally weather also contribute to the grounding factor of a vessel. Cyclonic weather conditions also play a key role in such mishaps.

3. Poor Seamanship Practice-

When a ship's crew including officers become casual in their work and good seamanship and safe navigational practices are ignored, for example, while entering/leaving the harbor, the anchor of the required side should be made in 'cock a Bill' position and made ready for 'letting go'. But if these practices are not followed strictly, then in case of machinery failure steering gear break down, engine failure, etc. the dropping of anchor immediately to avoid collision/ grounding would not be possible and accident/incident.

4. Tug Failure-

In addition to the above equipment failure of the tug, the towing/pulling ship/equipment/gears may not be available at that time or requirement. This may subsequently put the ship in a dangerous situation of getting grounded in adverse weather conditions.

5. Human Error-

Excessive engine orders, judgment in giving wheel orders at appropriate time wrong appreciation/ignorance of wind effect on superstructure/freeboard, giving engine orders when it is not required, incorrect calculation of tide and current effects, etc. can also result in difficult situations for the vessels movement.

6. Uncharted Dangers-

Continuous in sea bed conditions due to seismic activities under the sea, the earlier sunken objects, may surface or come up but remain submerged, which would pose

a great danger to the safe navigation.

B. Collision:

It may occur involving two vessels, tug boats, etc. at the same time in the channel or inside the harbor, or anywhere. The ship may also collide with the Jetty/Berth while berthing/Un-berthing. This situation may develop any time of the year and anywhere inside as well as outside the harbor.

C. Bunkering:

During the process of taking a bunker, a spill may occur due to:

- Bursting/rupturing/wrong fitments/leakage of hoses.
- Overflow of the ship's tank/storage.

Since the bunkering will be carried out only in the daytime and in the sheltered waters and also would be suspended or not permitted at the wind speeds of more than 25-30 kts, the spill is unlikely to take place due to the bad weather conditions. However, if it does occur, it may be of a very small quantity, except for when a fully laden tanker of 15 to 20 KL falls overboard from the jetty, during movement. It is assumed that the bunkering to the tugs is carried out by the gravity method and one attending is present at the discharge and receiving points till completion of the bunkering process. The spill movement scenario would be the same as amplified earlier in different situations.

D. Disposal of bilge:

Discharging of bilge by the ships at anchorage or while berthed alongside knowingly/unknowingly will create a situation that will be visible in the water limits or the Angre Port as well as in the port limits of Jaigad Port

4.8 Shoreline Sensitive Mapping-

- **Identification**

The certain coastline can be more sensitive and they are to be saved first in case of any oil spill.

In that also, we prioritize which is to be attended to, first. The priority for the protection of shoreline zone areas is to protect those areas which have great

economic, environmental, and social importance, and following figure in this list.

- Jaigad fishing harbor
- Jaigad Village
- Tavsal Village
- Shastri River
- Angre Port Jetty and Lavagn dock yards shore line.

A Photographs showing these sensitive areas is placed in ***Appendix- 08***

4.9 Shoreline Resources, Priorities for Protection

The booming positions to protect sensitive areas are marked in the chart and placed in ***Appendix-2***

Prioritizing the sensitive areas as per their importance is necessary because it must be understood well that any oil spill would cause damage, and the quantum of damage, is to be assessed and capability prepared accordingly.

The list of such recyclers close to the port is in ***Appendix-09***

Chapter-5

Response Strategy

Contents

5. Response Strategy-

The main strategy of the port is containment and recovery in the normal weather by mechanical means. Oil spill dispersant can be used, in weather not amenable to physical utilization of booms and skimmer combination. The strategy also includes non-oiling of the shoreline. The reason for this same in all areas, inside the port, are considered highly sensitive.

The company's policy towards OSR activities is to:

- Adequately trained manpower, and equipment and connected logistics availability with updated relevant response plans.

- Immediate response to oil spills to protect marine & human life and minimize environmental impacts.

- Interact with government and the local community to address issues relating to oil spills for mutual trust and co-operation.

- Maintain management system for the above to company statutory regulations and industry guidelines.

The port ascertains that everyone operating in the company, whether employee or contractor personnel, is responsible for the implementation of this policy in association with their specific duties.

5.1. Limiting and Adverse Conditions

It is to be well understood that any response is likely to be less effective in bad sea conditions, low visibility, and during dark hour operations.

5.2. Oil Spill Response in Offshore Zones

Any oil Spill occurrence at anchorage is remote and has been completely ruled out as the shipping/vessel traffic at this port is the only one that utilizes this anchorage. There have been negligible movements of vessels in the Angre Port.

a. Monitor and Evaluate-

Monitoring and evaluation of the spill is an important process, as it helps the response team in planning and executing its activities. The monitoring can be done by boat and can be updated by the emergency control room (ECR) by plotting the position on a relevant chart. The emergency control team (ECT) can study the inputs received from various sources, evaluate the size of an oil spill and declare it as a minor or Tire-1 or Tire-2 level oil spill.

b. Recovery storage and disposal-

In the current scenario, recovery and disposal seem a very possible scenario as per the oil modeling done and results seen. Conventional OSR response with booms

and skimmers will be effective and recovered oil can be disposed of as per the Maharashtra pollution control board's regulation.

- The Oil Spill is encircled by containment booms in tandem with two boats holding and towing either end of the boom moving from the leeward side to the windward side and adjusting to the drifting current pattern at the time of spill containment operations the state of the tide. The flood or ebb tides to matter while detecting the direction of the flow of the spill, and the areas that may be affected by it.

- Skimmer placed on a pollution control boat will collect the oil on a floating reception facility on a barge or tug connected with flexible floating hoses connected to skimmers.

- The port mooring boats and small fishing boats with lesser freeboard will be used to recover oil in shallow waters by absorbing pads and mops.

- The pollution control officer and environment engineer at the port site office will deploy reception barge/tugs, and other equipment and manpower to recover pollutants.

- The Port Head will arrange for the deployment of the contractors to recover pollutants from Shastri River.

- The Expert's help from the forest department will be sought in case of sea birds are found affected by oil spill sleek.

5.3. Shoreline Oil Spill Response

Collection of oil and oil must be done manually for the oil spill hitting the shore, in the temporary storage tanks and disposal will be as per IMO and State Pollution Control Board guidelines in force through registered oil recyclers of the state.

The OSR team is to prepare itself well in advance during mock drills, for shore cleanup activities. In this process, the shore cleanup, and equipment are to be checked for operational availability and then arranged and kept ready for deployments at short notice. This will ensure that the OSR team spends very little time on transportation and subsequent deployment. The potential impact areas are predominantly mangroves and fishing villages.

5.4. Storage and Disposal of Oil and Oily Waste

The recovered oil-water mixture will be collected in the tanks. If this is not practical

then in that case, floating tanks are to be used for the storage and transportation of recovered oil. If the spill recovery point is close to the shore, then in that case the same is to be stored in open storage tanks/drums and subsequently pumped to the tanker trucks for disposal.

A range of options for shoreline clean-up and waste disposal methods as per IMO guidelines is given below.

- The Port head will endeavor to deploy several crafts with dispersants to clean the waters of the port after the major recovery.
- Angre Port will make further arrangements for the requisition of chemical dispersants from other sources identified under Mutual Aid scheme of this plan.
- The Port head will arrange for the deployment of several contractors listed by APPL under this plan for cleaning up sea beaches, jetty, and other structures.
- Systematic disposal of pollutants collected by the recovery process by using tank Lorries.
- Cleaning charges shall be imposed by APPL on polluting vessel/vessel under MS Act or on any other agency responsible for the spill under State Pollution Control Laws.
- APPL will inform and coordinate with Customs Authorities, Maharashtra State Pollution Control Board, and other District Authorities.
- APPL will make a survey for damage assessment and will arrange to recover expenses.
- APPL will make a detailed report to the Ministry of Shipping, MMD, D. G. Shipping, Coast Guard, State and Central Environment Agencies.

Oil Spill Response Equipment Details are placed in ***Appendix- 10***

Separation and Disposal of Oil & Debris

Type of Material	Separation Methods	Disposal Methods
Liquids	Gravity separation of free water	Use of recovered oil as fuel or refinery feedstock
Emulsified	Emulsion broken to release water by:	Use of recovered liquid oil as the fuel of refinery feedstock.

	Heat treatment emulsion breaking chemicals mixing with sand	Return of separated sand to a source.
Tar balls	Separation from sand by sieving	Direct disposal burning.
Oil mixed with wood, plastics, seaweed, and sorbents	Collection of liquid from debris during temporary storage. Flushing of oil from debris with water.	Direct disposal of burning degradation through land farming or composting for oil mixed with seaweed or nature sorbents.
Solids Oil mixed with sand	Collection of liquid oil leaching from sand during temporary storage. Extraction of oil from sand by washing with water or solvent, removal of solid oils by sieving	Use of recovered liquid oil as the fuel of refinery feedstock. Direct disposal stabilization with an inorganic material. Degradation through land farming or composting burning.

Chapter-6

Management, Manpower & Training

Contents

6. Management, Manpower & Training-

If the situation demands mobilization of the Offshore Emergency Response Team(ETR), the following action is required to be undertaken by the team member.

1. Get ready to prepare the equipment for operation.

2. Offshore ERT to get transferred to the vessel by boat.

3. Ensure VHF/ Cell Phone communication is checked and established with ECR.

4. While the vessel proceeds to the oil spill area, get ready to deploy the equipment.

5. Coordinate with the master of the vessel to line up storage tanks for receiving recovered oil.

6. Carry out operations under instructions from OSC

7. Coordinate with other response teams if mobilized.

In the initial stages of a spill emanating from an offshore accident/incident, these functions will be carried out by vessel personnel. Therefore on the arrival of OSC, they will assess the situation, plan the strategy for deployment of OSR equipment and offshore emergency response team to the available vessel and commence the emergency response operations. The backup emergency response team will be kept ready at the shore. Subsequently, more resources will be mobilized through the ECR, if required.

Both the offshore and onshore ERT's of Angre Port will be required to assemble at the ECR, immediately on sounding of the response activation alarm. In the event of the spill moving towards the shore, onshore, Oil Spill Response Team will also be pressed into service but without the vessel crew.

The details of Organization chart is given in ***Appendix-11***

6.1. Incident Controller (IC)

The IC is responsible for all the clean-up activities associated with oil spills arising at the spill site at sea as well as on the shores. He will evolve an appropriate strategy for the spill response operations in consultation with OSC. His duties include:

- Assume overall in charge of the situation.
- Proceed to ECR

- Evaluate the severity of the situation

- Inform management

- Ensure other protocols and regulatory requirements are taken care of.

- Arrange funds for mobilization as the situation warrants. By informing the accounts department.

- Recommend mobilization of the resources from external agencies such as the Coast Guard, adjacent ports, etc., as required.

- Recommend mobilization of resources and trained manpower from private agencies in this field, if the situation demands that.

6.2. Initial Action In The Event of a Spill-

- Receive a brief from an observer of the spill

- Assess the situation and take appropriate steps to:

- Establish the source of the leak.

- Reduce/prevent further leaks.

- Deal with the spill

  - Post a spill observer who will continually monitor the direction of oil spread.

  - Muster the Port's Oil Spill ERT and mobilize them to activate OSR equipment.

  - Raise alarms and shut down shipping operations as necessary.

  - Inform immediately the section head of the department, who will immediately assume the role of OSC.

  - Send a Report on the spill to Corporate Office in consultation with HOD Marine using the initial pollution report format.

  - Handle any associated emergency with wider implications in accordance with Incident Response Plans.
  - If the leak is continuing and large, assess the:

  - Risk to life and the vessels alongside astern and ahead or in the harbor.

  - Size and consequences of the spill.

  - The ability of the personnel and vessel to handle the spill.

- Request support from external resources.

- Instruct the designated persons/vessel to spray dispersant in consultation with OSC after obtaining permission from Coast Guard through ECR.

6.3. Duties:

- Coordinating OSR efforts between OSC and ECR.

- Providing all support in terms of manpower, equipment, vehicles, watercraft, etc. as available within his powers or obtaining appropriate approvals for the same.

- Making available all the latest weather forecasts to the OSC both in afloat and ashore operations.

- Providing medical cover ashore and transfer of patients/causality for specialized medical care.

- Ensure that OSC and his team are provided food and water at the worksite, so as to ensure the operations continue round the clock till its completion.

- Ensure that every action carried out under his supervision is suitably logged in the incident logbook.

6.4. Responsibilities of On-Scene Commander (OSC)

- Safe and effective deployment and recovery of OSR equipment

- Effective deployment of a trained team of Oil Spill Response personnel and their turnaround in duties.

- Requisitioning of additional manpower from HOD- HRD from Security Guards or Casual labors for works as required on land-based operations or waterborne operations.
- Effective and safe deployment of trained manpower.

- Ensuring that Oil Spill Combat is carried out around the clock till it's complete.

- Prepare the duty roster of OSR personnel and ensure that everyone has understood his part of the duty to be performed.

- Ensure that each duty watch on duty is suitably turned around as demanded of the situation.

- He should be always in communication with his team/teams as well as with the emergency control room (ECR) and by means of VHF / Mobile phone.

- Ensure that each duty team leader is equipped with suitable communication equipment to assess the oil spill scenario and declare it a Minor Oil Spill or Major Oil Spill of Tier I, Tier II, or Tier III.

- Ensure that all the actions carried out are suitably logged by the Team Leader in a proper format.

- Manager Marine has been designated as On-Scene Commander (OSC). He will be reporting directly to the Head of Port who has been designated as Incident Controller (IC) of the events and also routing all requirements of men and materials including watercraft, vehicles, cranes, etc. to him only.

- The OSC would be responsible for safe recovery/return, accounting of all items provided to his OSR team.

- The OSC must ensure that his OSR team members are in possession of essential safety/working gears i.e. Jackets, Raincoats, Torches, Lifelines, Lifebuoy, etc.

- The status of the report on the serviceability of the equipment is also to be submitted along with the report on the operations.

- The OSC will also be responsible for taking necessary preventive measures against Oil Fire arising out of any situation/action.

- A check-off list is to be made for the equipment to be carried, both afloat and ashore separately.

- A check-off lost for Do's and Don'ts is also to be made and kept ready well in advance and all the members of the team are to be made to refresh themselves of the contents before departing for the site.

- The OSC may also carry with him a hand – held GPS along with Binoculars and VHF set.

- Periodical turning around of machinery / adequate rest is also an integral part of the OSC's duties.

- Collection of Oil/water samples every 4-6 hours is to be done by the OSR team leader under the directives of OSC.

- While operating ashore OSC is to keep tide conditions always in mind and keep the stores and vehicles always away from high water lines to avoid damages from seawater / getting bogged down in loose sand.

- Sufficient lighting arrangement at the worksite while working Ashore / Afloat is to be ensured by the OSC.

- The first aid kit is to be available with the teams at their worksite.

6.5. Incident Organization Chart-

The incident organization chart /information system flow chart and emergency response organization chart are placed in Appendix- 11

The emergency control team (ECT) is headed by the incident controller (IC) and consists of senior managers from various departments for providing expertise in their domain to the team and also on the approval/clearance for any immediate requirement arising out of the situation.

The following personnel are designated

1. HOD Marine - Incident Controller (IC)
2. Manager F & S- On-Scene Commander (OSC)

The composition of the emergency control team (ECT) which will be functioning from the emergency control room (ECR) is below.

1. HOD Marine- Incident Controller (IC)
2. Head Mach. /Elect. Member
3. Head EHS Member
4. Head Civil Member
5. Head Administration Member

6.	Head HR	Member
7.	Head Accounts	Member
8.	Manager Security	Member
9.	ECR In charge	Member
10.	Head Contract and Material	Member

6.6. Action by APPL:

During Oil Spill Containment and control operations at the Port it is imperative that Port Head and his action group will need to be supported by other department personnel with equipment transport and communications network to assist the operations

➢ Head Mech. / Electrical as Member

- To ensure that all tugs and launches are managed and ready to move as per Port Heads' requirements.
- To arrange for all available workshop support.
- To arrange for tank Lorries, empty drums, mobile cranes forklifts, pay loader, and, any other equipment to assist in the collection and disposal of spill oil/ chemicals.
- Arrange for standby generators and captive power to the port area.

Immediate:

- Start a personal log of events.
- Receive brief from ECT leader
- Establish communications with masters of the vessels and obtain the latest information.
- Immediately proceed to ECR and assess the situation.
- Brief Unit Head on the latest status and available offshore/onshore resources.

As Circumstances Require:

- Assist the ECT Leader with oil slick plotting, monitoring, and forecasting using manual or computer modeling techniques as available.
- Liaise with OSR Team leader, if mobilize.

General:

- Keep a detailed log of events.
- Follow the detailed procedures according to the size of the oil spill.
- Monitor offshore clean-up operations.

Standing Down:

- Stand down only after instruction from IC.
- Submit a log of events to the head of the department (Jetty)

➢ Head Civil as a member:

To pan and arrange contractors to clean up jetty structure and beaches and water front of the port.

- Start a personal log of events.
- Receive brief from ECT leader.
- Immediately proceed to ECR and assess the situation.
- Assist ECT leader in reporting to partners/directors and other Gov. Agencies.
- Monitor weather/sea conditions and ECT leader as required.

As Circumstances Require:

- Inform Gov. Authorities as required.
- Recommend requesting Coast Guard to take over the situation under National Oil Spill Disaster Contingency Plan.
- Consider getting help from other operators and other resource agencies.
- Monitor on-shore cleanup activities very closely.
- Assess the extent of loss and initiate insurance formalities with the accounts head.

Standing Down:

- Inform Gov. Authorities as required.
- Collect all logs of events from duty officials.
- Collect log of events from offshore.
- Mobilize investigation and record all outcomes.
- Prepare and circulate the investigation report.
- Monitor implementation of action items and close each item.

➢ Head Administration:

- RPO to set up information Centre for handling equipment's and addresses the press and media for public information.

- All statement and information to be released after confirmation from Port Head.

Immediate:

- Start a personal log of events.
- Receive brief from ECT Leader.
- Mobilize additional Boat and other crafts if required.
- Brief boat master and other operators, and pilots on requirements e. g.

  - Locating Slick

  - Position to remain in relation to the slick.

  - Speed and direction of the craft.

- Coordinate flights/vessels as advised by the ECT leader.

As Circumstances Require:

- Obtain a suitable slick tracking model for the size of an oil spill that has occurred as predict the likely developments of the incident.
- Mobilize clean-up teams and equipment offshore as advised by ECT.
- Mobilize onshore clean-up teams and equipment as advised by ECT.
- Liaise with an incident controller on the progress of resource availability and clean-up operation.
- Arrange for the contracted vessels to be equipped with the additional required equipment.

- Seek help from the coast guard if aerial dispersant spraying is required.
- Inform nearby port operators if slick is identified to be moving out of our operating area to their area.
- Closely monitor onshore clean-up operations and give updates to ECR.
- Obtain necessary clearances for OSR personnel and equipment arriving from national or any other international agency.

General:

- Keep a detailed log of events.
- Procure supplies, equipment manpower, and transportation through retained oil spill contractors, ports, etc.
- Log all requests made for equipment/suppliers' sources.

Standing Down:

- Stand down only after instruction from the ECT leader.
- Submit log of events to operation manager (jetty operations)
- Arrange to return equipment/services availed from other sources.
- Commence procedure to ensure payments are made for emergency resources.

➢ Head HR- Media Coordinator

General:

- Assume charge as and when nominated by the ECT leader.
- Stars log of events.
- Assist the ECT leader in preparing and releasing press releases as required.
- Maintain the central log of events for the ECT leader.
- Ensure communication channels are properly connected.

As Circumstances Require:

- Mobilize the media control room.
- Provide a link between ECR and the media control room.
- Arrange press meet when authorized by ECT leader.

Standing Down:

- Stand down only after instructions from the ECT leader.
- Submit a log of events to the Marine Head.

➢ Manager Security as a Member:

Submission of reports to Gov. Agencies and all security matters.

➢ Accounts Head as a Member:

To assist ECRT leaders and members on all financial matters.

➢ Head HSE as a Member:

Submission of reports to Gov. Agencies (e.g. Ministry of Environment and Forests (MOEF), State Pollution Control Boards, etc.)

➢ Medical Officer:

The medical officer will join his department the movement ECT is activated. He will be on standby for any response to any injury or situation demanding medical

treatment and will initiate and suggest the best course of action to be taken for the treatment. In the case of evacuation programs, he will coordinate with the concerned hospital, depending upon the nature of help needed, regarding the admission of the patient and will finalize everything for the treatment by the time the patient is shifted to a bigger hospital at Ratnagiri.

All expenses in this regard are to be accounted for separately, as these may be needed for insurance claims along with all the other expenses, related to oil spill response.

➢ Emergency Control Room (ECR) in charge:

The staffing of ECR would be required from various departments, however, a person is to be designated as an Emergency Control Room (ECR) In Charge.

- Maintain the serviceability of the equipment's provider for use in ECR.
- Maintain the VHF communication between ships and ECR.
- Log all the communication and events of the ECR.
- Collect all the weather data from ships/IMD
- Plot and track the position of the oil slick on the chart.
- Prepare a daily log of events and hand it over to the ECR Team leader daily.
- Assist ECR Team members in carrying out tabletop exercises/actual operations.
- Maintain liaison with other departments for the requirements of ECR.

The Head Marine and Head HR will be providing necessary skilled and unskilled personnel for the OSR Team, both from the marine and non-marine fields.

➢ HOD – Contract & Materials

Immediate:

- Start personnel log of events.
- Receive brief from OSC
- Mobilize additional boats and vehicles as required

As circumstances require:

- Mobilize ERTs and equipment offshore as advised by ECT as required.
- Mobilize onshore ERTs and equipment as advised by ECT.
- Liaise with WIC on the progress of resource availability and clean-up operations.
- Obtain necessary clearances for OSR personnel & equipment arriving from outside.

General:

- Keep a detailed log of events.
- Procure supplies, equipment, manpower, and transportation through a retained oil spill.
- Log all requirements made for supplies/equipment resources.

Standing Down:

- Stand down only after instruction from OSC.
- Submit a log of events to HODs.
- Arrange to return equipment's/services available from other sources.

➢ Action by Material Management Department:

- To plan and arrange to outsource of all types of dispersants and other materials that will help to collect and dispose of the spill.

- To plan and arrange an additional supply of fuel for the trucks, Lorries, floating crafts, and tugs, launched for oil spill management.

➢ Action by Medical Management:

- All doctors, nurses and other general medical staff will standby with ambulances, stretchers, and first aid kits and be ready to receive casualties.

➢ Action by Cargo Department:

- Will assist in stopping/regulating cargo work and help in process of cleaning up of jetty.

- Will assist in emergency management of road traffic in the port near the emergency area.

➢ Action by PFSO:

- Enhancement of appropriate security by level under ISPS code.

- Arrange for fire-fighting equipment

- Plan and arrange the total isolation of emergency site.

6.7. Manpower Availability – On-site, on-call

- The Marine Department will maintain the OSR equipment under the guidance of OSC
-
- HSE Department in consultation with the Marine Department will look after the training and exercise part.
-
- The administration department will provide assistance with additional watercraft, vessels, mobile cranes, forklifts, etc.

6.8. Availability of Additional Manpower:

Any requirement of additional manpower will be met by the HR Department, which will be maintaining a list of trained manpower available with various departments and also casual workers who can be utilized ashore for shore clean-up operations or as deemed fit. It is pertinent to mention here, that while utilizing such people for this type of job it would be better to securitize such people of their suitability for skilled and unskilled work well beforehand. This work is to be undertaken during Mock Drills so as to ensure the availability of a dependable additional workforce apart from the designated workforce.

Chapter-7

Training / Safety Schedules and Drill/Exercise Program

Contents

7. Training / Safety Schedules and Drill/Exercise Program:

Personnel of various departments of this port nominated as Oil Spill Responders for Oil Spill Response and Emergency Management Duties shall undergo training appropriate to their role and responsibility.

The OSC will ensure that all Emergency Response Team personnel, who are required to operate OSR equipment, undergo training for effective deployment of equipment and associated devices.

OSC is to co-ordinate and render help as required to the Masters of Vessels and is to ensure that their crew is fully trained and current for effective deployment of equipment.

A periodical program drowns by the training department, involving all the concerned departments' fixes a training schedule, so that the Oil Spill Drills and actual operations if any, are done with complete ease and professionalism. This training covers the basic theoretical and practical exposure of oil spill response to the newcomers and experienced people. It provides the knowledge and information about the Oil Spill causes, prevention, response equipment; capabilities and limitations; type and deployment of different types of equipment at different situations and locations, etc.

A training matrix involving all concerned levels of personnel is placed in ***Appendix-12***

7.1. Exercises and Drills:

Regular exercises and drills form part of this plan and a schedule is to be drawn in consultation with Administration and HSE department. Drill forms the integral part of the OSR team, which is to be exercised at frequent interval so as to make every team member perfect and understand what role he has to play. Exercises may be planned in consultation with HSE leader. This may be table top or in actual, with or without deployment of equipment's.

Exercises and Drills are an integral part of any team work, even if the incidents / accidents are expected not to take place due to various safety / precautionary measures are in place. HSE Department is to plan periodical exercises in conjunction with other departmental programmers. The regular testing of the OSCP will ensure that skills and awareness of ERT are maintained in a state of operational readiness. In order to have optimal utilization of equipment and to minimize wear and tear in each exercise, annual exercises are proposed for testing OSCP and ERT. Testing and exercises also provide management an opportunity to access equipment, measure performance and obtain feedback from participants, update and correct the OSCP and provide inputs to the company's commitment on oil spill prevention and response.

Exercise and drills involve any or a combination of the following:

- Oil Spill Contingency Plan orientation
- Table top scenarios for the Incident management team (OSC & ERT Leader)
- Table top scenarios for the ECT (Emergency Control Team)

- Notification and callout procedures.
- Equipment and personnel mobilization and deployment.
- Joint exercises with other organizations.
- Full scale incident management exercises.

Each exercise shall be debriefed to identify weaknesses in the OSCP and equipment, and to undertake appropriate remedial action wherever required. The EHS department / Marine HOD will ensure that amendments reflecting these actions are incorporated into this plan.

7.2. Safety:

According to Occupational Safety and Health Act, employers are required to provide a safe and healthy atmosphere and a workplace free of recognized hazards and OSHA standards. In this regard, they are also required to arrange for necessary training and provide appropriate protective equipment. It is very important that the worker also must adhere to the employer's safety and health rules stipulated to comply with OSHA standards. They must use and wear the required gear and equipment. It is a very important and healthy sign that workers are encouraged in reporting hazardous conditions, whenever and wherever it occurs to their supervisor and reports. Head- HSE will ensure strict compliance with all Safety Standards.

7.3. General Safety & Health Rules:

- All work-related injuries/illnesses or vehicles collision, no matter how small/minor they are, shall be reported immediately to the supervisor/safety in charge.
- All fire spills, and releases, no matter how small, shall be reported immediately to the supervisor/HSE department.
- Immediately report any unsafe condition, practices, near miss, or incident to the supervisor/HSE department.
- All personnel shall wear a seatbelt while in company vehicles, including rental cars and personal cars utilized on business travel/official travel.
- Possession, use, distribution, or being under the influence of prohibited drugs or alcohol while on the job or company premises is strictly prohibited.

- The use or possession of firearms, deadly weapons, or unauthorized explosives on the company premises is strictly prohibited.

- Smoking is permitted in designated areas only.

- No unauthorized work be started in any area or any equipment without consent of the company's person-in-charge (PIC)

- Operation equipment having a "DANGER, DO NOT OPERATE" tag is strictly prohibited.

- Under normal operation, all operating machinery and electrical switchgear must have all safety guards, switches, and alarms in place and functional.

- Finger rings, wristwatches, and other jewelry, along with loose clothing, unsecured long hair, and other loose accessories shall not be worn when within arm's reach of unguarded operating machinery or electrical switchgear.

- Do not apply compressed air to yourself or others.

- When ascending/descending stairways, use the handrail and take one step at a time.

- Running in work areas, except for emergency purpose is prohibited.

- Use only proper tools and equipment maintained in good working condition.

- Ladders, work platforms, scaffolding, personal lifts, or fall protection must be used when working at heights greater than 6ft, and the potential for falling exists.

- Fire extinguishers and all other emergency equipment must be in good condition and inspected regularly and kept clear of any obstruction.

- Use proper lifting techniques such as bending the knees, obtaining assistance, or mechanical lifting loads.
- Approved hard hats shall be worn in field operations and other designated areas.
- Approved foot protection is required in field operations and other designated areas.

- Approved safety eyewear shall be worn in field operations and other designated areas.

- Eye/face protection such as goggles as a face shield shall be worn during grinding welding, drilling, scraping, or any operation where foreign objects may enter and damage the eyes.

- Personnel handling chemicals or other agents shall wear proper eye or face protection gear and other PPEs as recommended by the HSE department.

- Hearing protection/ear defenders shall be worn in high noise areas (85dB or higher)

- Personnel shall wear proper hand protection when performing tasks that may present injury to hands.

- Personnel shall wear an approved Personal Flotation Device (PFD) securely fastened during exposed offshore/vessel jobs.

- Personnel shall also secure themselves with a suitable fire line while working above the water line and while working on a high mast or pole, etc.

7.4. Hazardous Chemicals & Materials:

Basic common rules and procedures while working with chemicals

- In case of eye contact promptly flush eyes with clean fresh water for a prolonged period

- In case of skin contact, promptly flush the affected area with water and remove contaminated clothing and seek medical attention.

- Do not smell or test chemicals to find out the identity.

- Do not eat, drink, smoke, chew gum, or apply cosmetics in areas where hazardous chemicals are in use. Wash hands before conducting these activities.
- All chemical and equipment containers shall be properly labeled duly mentioning their shelf life and then stored.
- HSE in charge must ensure that all persons, including visitors, wear appropriate eye protection where chemicals are stored or handled.

- Were appropriate gloves when the potential for contact with hazardous

materials exists, inspect the gloves before each use, wash them before removal and replace them periodically and always use dry gloves to work.

- A Material Safety Datasheet (MSDS) for each chemical is a must and shall be readily available as well as pasted on the container.

- No hazardous chemical shall be accepted without appropriate labeling and MSDS.

- Toxic substances shall be segregated in a well-identified area with adequate exhaust ventilation.

- Stored chemicals shall be examined periodically for container integrity.

Chapter-8

Communication & Control

Contents

8.1. Incident Control Room and Facilities:

The Marine Control Room is earmarked as the Incident Control Room. This room may also be referred to as Emergency Control Room (ECR). The ECR is used for Emergency Control Team (ECT) to assemble and operate from here. Entire OSR operations will be observed, directed, and reviewed from this room.

It will also require a member from any section, to be nominated to assist ECT in its functions. In the event of an Oil Spill Emergency and shall be stationed at ECR under

the direct control of IC right from the beginning to the end of the events.

Duties of personnel from Drawing and Admin sections:

- Assist the ECT in all respects when functioning from ECR.
- Maintain and update all the records and data at ECR.
- Maintain/Update all charts and maps.
- Plot all Oil Slick Movements as per the inputs received from time to time, and put them up to ECT members.
- Ensure serviceability of all the items and equipment provided in ECR under this custody.
- Maintain communication with offshore/onshore OSCs for regular updates on the events.
- Maintain blogs of all events taken inside the ECR.
- Prepare a brief at the end of the day for the ECT leader for submission.
- Maintain channels of communication on behalf of WIC.
- Ensure no information is communicated to an unauthorized person/agency.
- Maintain the confidentiality of the documents and information stored in electronic gadgets.
- To go back to the parent department after all record completion, in the event of stand down.

Duties Assigned For Assistance:

Help IC to run ECR proceedings during Oil Spill Emergency, in this, they will maintain all the office equipment, documents, and records required during such operations. They will manage communication systems and suitably log all the events for report making and debriefing. Plotting spill movement on charts, and updating all charts and records are also part of their duty. They will keep IC updated on all the information. Reports, weather data, etc. as received from outside sources.

An ideal ECR may have the following:

1. Conference table & chairs to accommodate at least 10 to 12 senior officers.
2. All conference room facilities.
3. VHF communication facilities with ships and other vessels.
4. VHF Willkie Talkie communication facilities with OSC and ERTs.
5. Internal & External Telephone directories.
6. List of the important personnel and their cell numbers.
7. Navigational Charts, Map of the area as applicable.
8. Chart and Map showing sensitive areas with priorities for protection duty marked, and their approaches with distance, condition of roads, etc.
9. Stationary for day-to-day requirements.
10. Location of nearest Boat Jetty from landward as well as seaward side, and its various navigational particulars.
11. Distance of nearest port, railway station, airport, and the hospital facilities available.

8.2. Policy and procedure for the establishing:

The various facilities and administrative requirements of an Emergency Control Room (ECR) for the size, type, and importance of this are as below:

1. A whiteboard with suitable writing facilities.
2. A computer with a printer and presentation system.
3. A telephone with STD/ISD and fax facilities.

4. Copies of Disaster Management Plan (DMP)

5. Copy of Health Safety & Environment (HSE) policy of port.

8.3. Field Communication Equipment:

Communication plays a very vital role in the functioning of the response organization. There is no scope for any failure of being non-communicable. The facilities considered must be telephone with STD facility, Fax, VHF Set, Internal Telephone Directory, list of important telephone numbers of Dist. Administration, hospitals, fire stations, Air Ports, etc. with these facilities ECT would be able to communicate efficiently within and outside the port area with OSR Team Leaders, OSC Ships in harbor, etc.

The port possesses good communication equipment to meet its equipment. A normal VHF set is available to establish ship-to-ship-to-shore communication. In addition to this, every vessel and watercraft has been provided with VHF and mobile phones to establish communications as desired. The Radar is also being made available with the Marine Control Tower and in case of any required information or the required messages, authorities have to request IMD authorities for the information required.

Other field communication equipment will be:

- 01 fixed VHF set- Turned for all Marine Frequencies.
- Radar 25 KW -01 set
- Navtex- 01 set
- AIS- 01 set
- Portable VHF Sets – 04 Nos.
  - The listening watch is maintained on channels no- 14 & 16
  - The Angre Port communication channel between the port facility, port control, and the vessels operating under her directives would be primary CH-16 and thereafter shift to the desired channel.

A list of telephone and mobiles phone numbers for immediate contact in an Emergency is provided in ***Appendix – 13***

8.4. Reports, Manuals, Maps, Charts, and Incident Logs:

It is to be ensured that the basic information about the particulars of oil is ascertained from Oil Spill Report Form. This is essential in formulating a good and effective response strategy to combat the offshore emergency. The OSC shall complete the Oil Spill Emergency Report Form and forward it to IC. In all cases, the original report forms will be handed over to the IC as soon opportunity arises. The log maintained by every individual is an important document, as it narrates all the happenings and events taking place with the person concerned during the course of his duties. These logs are to reach IC/OSC for preparation of Reports, Debrief, and Record. These logs are the testimony of true happenings and experiences of persons involved in the operations and serve as a helping tool in the case study in the future course of time.

The formats of reports & Logs are placed in ***Appendix- 14***

8.5. Notification of Oil Spill to Concerned Authorities:

The moment of Oil Spill is reported to various departments, the emergency calls procedures is be adopted, and the action by:

1. The Marine department is to provide all the relevant data for the day to ECT i.e. spot of spill and quantity, tide conditions at that time, tide timing, current, wind speed, weather forecast, Vessel movements, vessel position in harbor, watercraft's available for pollution response activities. Any other important data/information/chart may also be provided.

2. The administrative department is to provide information regarding the availability of type and number of vehicles available for transportation of men and equipment. Also, a number of security personnel and casual laborers are available at that time.

3. Fire & Safety department is to indicate reediness about Fire Contingency including Oil Fire, and also the number of spare Life Jackets available.
4. The security department is to enhance the security level so as to prevent unauthorized entry to the spill area/site.

8.6. Notifying Key Team Members And Authorities:

The incident of the Oil Spill will be informed by the OSC to the IC who in turn will inform all the concerned members and the authorities as per the existing information system prevailing.

8.7. Managing Control Room:

Upon receipt of information, Emergency Control Team will assemble at the Emergency Control Room (ECR).

8.8. Preliminary Estimate of Response Tier:

In the event of OSC getting the spill information, he will immediately inspect the area and assess the quantum of the spill, damage to vessel, environment, the threat to other sensitive areas, etc., and inform IC accordingly. IC will immediately assemble his ECT members and assess the situation for the action and strategy required, whether the situation warrants raising the Tier level, or can be undertaken by our responders, or response work can be undertaken with the help of additional manpower and pieces of equipment from the neighbors.

For example, if a vessel of 30,000 DWT fully loaded with a bunker, has met with an accident and develops a leak. Then, in that case, a Tier II spill has to be declared and action initiated accordingly provided the leak is below the waterline. But, in case of a leak from just below the deck level; the raising of tier level may not be needed at all. This could be easily handled by the Port's Spill Response Team itself.

8.9. Collecting Information:

In the event of an Oil Spill, the following information's essential to be collected by the OSC immediately, with the active participation of the vessel's master.

- Time of the spill incident.
- Position in Latitude/ Longitude if possible.
- Reference of a prominent landmark if close to the shore.
- Visual appearance, the apparent thickness of the oil, and the extent of area covered.
- Percentage cover of various thicknesses of the oil.
- Existing weather conditions and weather forecast.
- Immediate availability of support vessels, equipment, and manpower specifying time factors as well.

- Estimated oil spill trajectory and likely area and time of making landfall.

8.10. Estimating Fate of Oil Slick:

Depending upon the weather condition and type of spill, the oil slick will move in a way determined by the sea conditions.

In the event of the spill reaching the shoreline, the time interval after which the spill is likely to reach the coast, its probable location, and the length of the impacted shoreline can be predicated on chart no. 2105 available in ECR, since the time interval after which the spill reaches the coast, is more or less independent of its magnitude, the extent of the coastline for the spill of various magnitudes can readily be estimated from the plotted position.

8.11. Identifying Resources Immediately on Risk:

Depending on the area likely to be affected as per the oil spill tracking conceded by local port authorities, coast guard, and other authorities/agencies, and applications are to be informed details of addressed, telephones nos. are placed in ***Appendix- 13***

8.12. Capability and Equipment:

S. No.	Particular	Details of Equipment
1	Present inventory of oil pollution response equipment	i. Oil Containment Boom 500 Mtrs. ii. Skimmer 01 no. iii. Portable pump for spraying dispersal from floating crafts. iv. Oil Dispersant chemical.
2	Response Craft fitted with equipment	i. Pollution control vessel fitted with the skimmer. ii. Provision for spraying of chemicals. iii. Fitted with equipment to carry containment boom and laying it promptly.
3	Vessel and crafts are available for pollution response operations.	i. Two Mooring launches with the pilot to spray dispersant by portable pump and to clean harbor water by absorbing pads and mops, etc. ii. Two tugs to tow containment boom in tandem. iii. One tug for towing reception barges. iv. One reception barge for storing oily bilge

		water and recovered oil. (500 DWT) v. One multipurpose barge for receiving oil sludge and debris up to 59 tons.
4	Air capability for the spray of dispersants, surveillance, and assessment of oil as well as response activity.	i. No air effort is available with APPL but can be outsourced through Coast Guard if required.
5	APPL organization for pollution control	i. Pollution Control at Jaigad. ii. The cell is headed by a qualified engineer. iii. Conduct an examination of the vessel prior to cargo operations to avoid pollution. iv. Monitor bunkering operations in the port. v. Coordinating deployment of equipment to deal with an oil slick. vi. Mobilize vessels and personnel for recovery of pollutants.
6	Mutual Aid Agencies with APPL	i. In the process to create a Mutual Aid with neighboring Terminals and ports in Ratnagiri Region.
7	Angre Port Reception Facility	i. Registered Re-cyclers available with port for reception facilities.
8	Oil Spill Co	i. Plan to be updated at regular intervals.
9	General Information	i. Re-processing and re-cycling of collected spill. ii. Disposal of oil oily waste, sludge and debris. iii. Cleaning up of beaches. iv. Cleaning up of permanent structure of port.

Chapter-9

Operations Planning

Contents

9.1. Shore Clean Up:

After spillage management decided that the shore clean-up is the only option, then all the shore clean-up resources and manpower be mobilized to the site in 4-wheeled vehicles/tractor-trailers. On reaching the site the OSC is to inspect the site thoroughly and inform the ECR about the scenario prevailing. Before standing any work, the OSC must obtain the weather forecast and tide condition at that time and brief the ETR leaders, and the strategy to be adopted. Sufficient lighting arrangement is also be made if the work is to be carried out during dark hours.

The shore clean-up be undertaken as the ebbing starts as the oil slick is likely to stick to the soil as the water recedes. This soil soaked is picked up manually with the help of shovels and collected in the big tarpaulin sheets spread on a sloppy area. If the oil content is substantial in the soil it will gradually trickle and can be collected in containers placed in the pit duck up at the situated place. The same can be disposed of as per the directives of the State Pollution Control Board. The soil left after the draining down of oil was washed by the spraying of seawater, the oil collected again, and then the soil dump into the trenches dug for the natural bio-degradation.

However, if the oil content is less than the soil collected can be dumped in bog pits, for natural bio-degradation, with prior permission from the authorities.

It is important to bear in mind that, the complete area has to be made oil-free. Therefore, an all-out effort is made to ensure every bit and piece of oil patch is also removed. The affected area has to be brought to its previous state.

Reliable and effective communication for having a positive control of the OSR operations among various agencies involved, both at the field level as well as at the Emergency Control Room is highly essential. Exchange of information/status reporting, etc. is to be carried out with the assistance of various forms/ logs, etc.

Available equipment at Crisis Management Center.

The details are placed in **Appendix-15**

9.2. Initial Pollution Report Format:

The “Oil Spill Report Form” is essential to be used by the OSC to pass on the relevant information to ECR.

The oil Spill Report Form is placed in ***Appendix- 16***

The details about the information asked in the pollution report format are as below.

- Date & time pollution observed and identity of observer/reporter.
- Position and extent of pollution. Name and position of polluting vessel and estimated amount of pollution.
- Wind speed and direction.

- Weather conditions and sea state.
- Characteristics of pollution. (Type of pollution, e. g. type of oil, lubricants, or otherwise. Also give the appearance, e. g. liquid, floating solid, liquid oil.)
- Source and cause of pollution. (e. g. name of the vessel, give a brief description)
- Forecast of likely effect of pollution, with approximate timing of likely hood of marking landfall or hitting the coast.
- Any other relevant information. (e. g. action taken or intended)

Telephone/mobile/VHF calls can over the above information, which has to be sent in writing in appropriate formats.

9.3. POLREP:

Information about the incident is to be intimated to the Operations Center, Coast Guard Region (VV) Mumbai. It is to be noted that even the smallest amount of oil spills have to be reported to Coast Guard.

The POLREP format is placed in ***Appendix- 17***

9.4. Assembling Full Response Team:

Once the spill emergency is declared and OSC has briefed the IC on the response priorities, he will assemble his OSR team at the pollution response center at a designated place or at the jetty and conduct a thorough briefing about each individual's role and responsibilities.

The required extra equipment is also simultaneously embarked on-board support vessel and is checked for their availability for development.
There may be a need to escalate the response to a higher tier as per the need of the hour. OSC will establish, justify this and advise IC to alert ECT to be on standby for mobilizing additional resources when required. As the response, activities progress, and results are visible the ECT will decide upon the stoppage or continuation of operations based on the observation of OSC and the recommendation of IC.

9.5. Media Briefing:

It is to be ensured that the initial press statement for media briefing be prepared with great care and accuracy as no changes in the subsequent statements would be

possible and difficult to answer if there are any differences. Therefore, in order to avoid any confusion/ misunderstanding, a press statement format has been suggested. This statement has to be signed by the competent releasing authority for release to the media and then only it is to be issued by the Public Relations Officer or Media Coordinator.

Press Statement Format is placed in ***Appendix- 18***

9.6. Deciding to Escalate Response to Higher Tier:

Once the Spill Response action has started and personnel deployed, the OSC takes stock of the situation and discovers or feels that the quantum of the oil spilled is much more than assessed, and the situation may go beyond their capacity to handle the spill response. Then must inform the ECR and request IC and other ECT members to inspect the site for their view. If the IC and his team members feel that the Spill Response needs revision to a higher Tier, then the decision is to be taken without much delay, as this needs much preparation for the movement of men and machinery from other institutions/agencies as soon as possible. This upward revision to a higher Tier of Spill Response needs to be informed to Coast Guard authorities at Ratnagiri and Mumbai.

The procedure of informing all concerned agencies/organizations of heightened spilled oil threat perception remains the same.

The concept of Tiered Response is placed in ***Appendix-19***

9.7. Public Relations:

All interactions with the media personnel are to be through the OIC and Media coordinator as follows:

- Calls from Media Personnel, Special Intersect Group, and Partner will be referred to OIC.

- Calls from Oil or Service Companies will only be put through to the ECR if they have a direct requirement on the emergency.
- Calls from relatives and friends of personnel involved in the incident will be answered to advise all callers of the most recent press statement.

- Call from a curious member of the public will be informed by the media coordinator that periodic press statements are being released.

9.8. Establishing field command post and communications:

It is essential that a field command post is established as soon as the spill response operation starts. This room should have the facilities for working of OSC, battery charging facilities for the VHFs and mobile phones, and a VHF antenna for getting better reception and transmission facilities. This will greatly help in case the operational area is far off from the base station. As far as the OSC is concerned, he will be equipped with a portable VHF and mobile phone. The ETR leaders would also be having handheld VHF sets and or mobile phones. The OSC is required to be in regular communication with ECR for all the reports and requirements.

In the care of requirements, this place can act as shelter from extreme weather conditions or as a First Aid Post also.

Chapter-10

Termination of Operations

Contents

10. Termination of Operations:

Once the pollution response Operations are over, the time to relax has not yet come. All the equipment's and machineries are to be accounted for, checked for their serviceability and then stored in their respective places. Consumables are to be accounted. All equipment's and machineries are to be thoroughly washed with fresh water as per the OEM's guidelines, necessary maintenance carried out and ensured that the equipment is ready for next deployment, and then only secure the equipment's. Any deficiency/defects are to be immediately reported upon. This process is to form the part of all the exercise also.

10.1 Deciding Final and Optimal Levels of Shoreline Clean-up:

It is well understood that most of the beaches are quit frequented by the public daily and in large numbers during weekends and holidays in particular. Therefore, the level of beach or shore clean-up required is quite significant, since these are frequented by public/tourists.

The other authorities/agencies i.e. Coast Guard Station- Ratnagiri, Maharashtra Pollution Control Board, State Forest and Fisheries department Officials etc. are to be consulted prior to starting and during such clean-up operations, as they may not have much to advise but certainly may come up with something criticize.

Any response operations can be termed completed only when all the machineries equipment's and consumables are accounted for, checked, their maintenance carried out and made ready for next operation and then stored in their respective places.

During maintenance all equipment's and machineries are to be thoroughly washed with fresh water as per the OEM's guidelines, necessary repairs, servicing, oiling/greasing etc. be carried out and then only the equipment's be considered as secured.

10.2 Preparing Final Detailed Report:

On completion of the OSR operation, the OSC is to prepare a detailed report covering all the aspects of the spill clean-up, including success and failures as well, lessons learnt, recommendations about equipment's, man power, plans etc. the report is to be as realistic as possible so that it gives a clear picture as to how, all the operations went on. Basically, intention behind this should be to suggest room for improvements required and lessons learnt for not making such mistakes in future, thereafter forward it to IC, who in turn will forward his report with the comments to the Management.

10.3 Reviewing Plan and Procedures from Lessons Learnt:

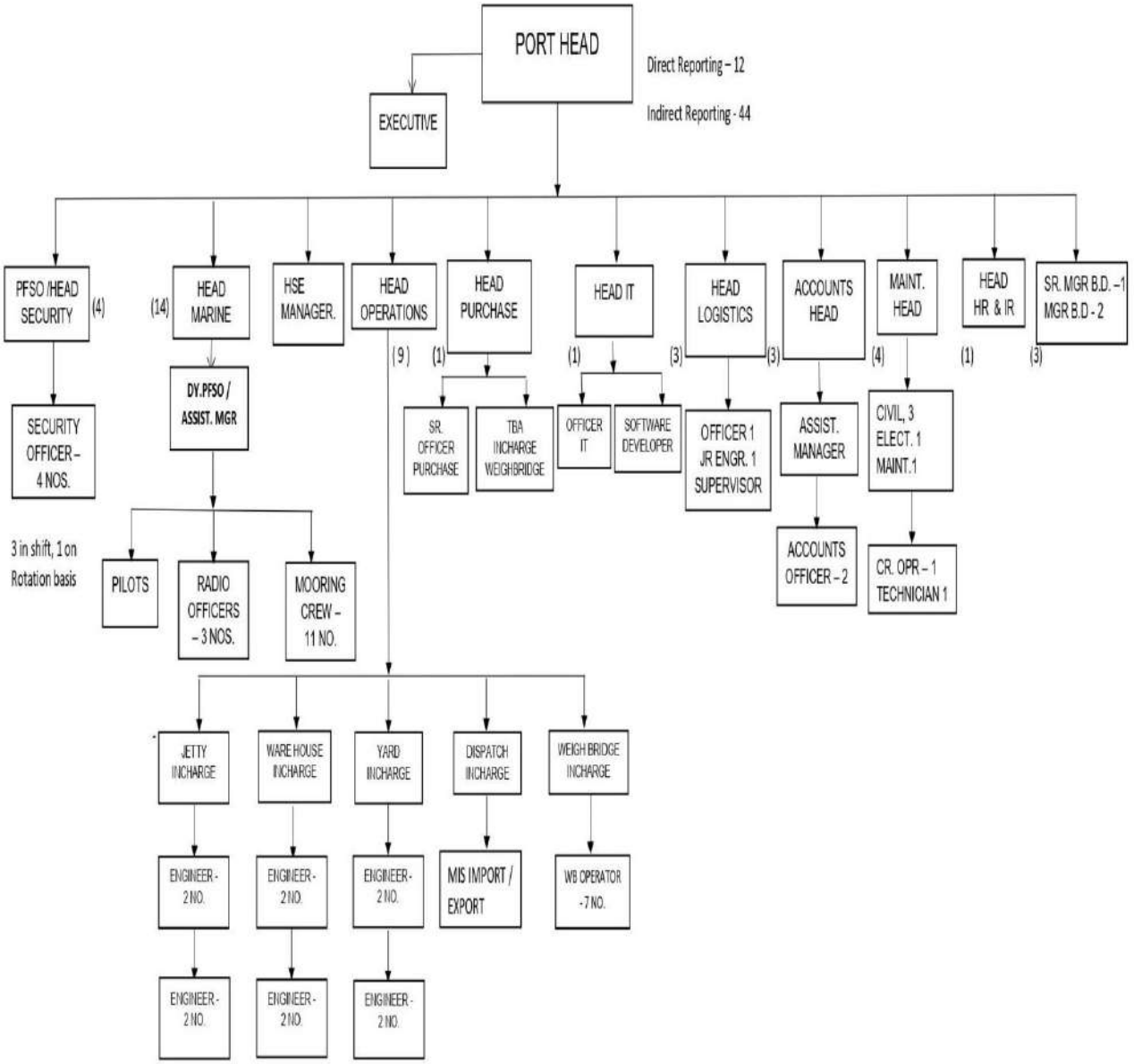
ECT should carryout critical analysis and honest deliberations on the report received from OSC/IC and give its clear recommendations to Port Head for putting it to board of directors for necessary action.

APPENDIX

LIST OF APPENDIX

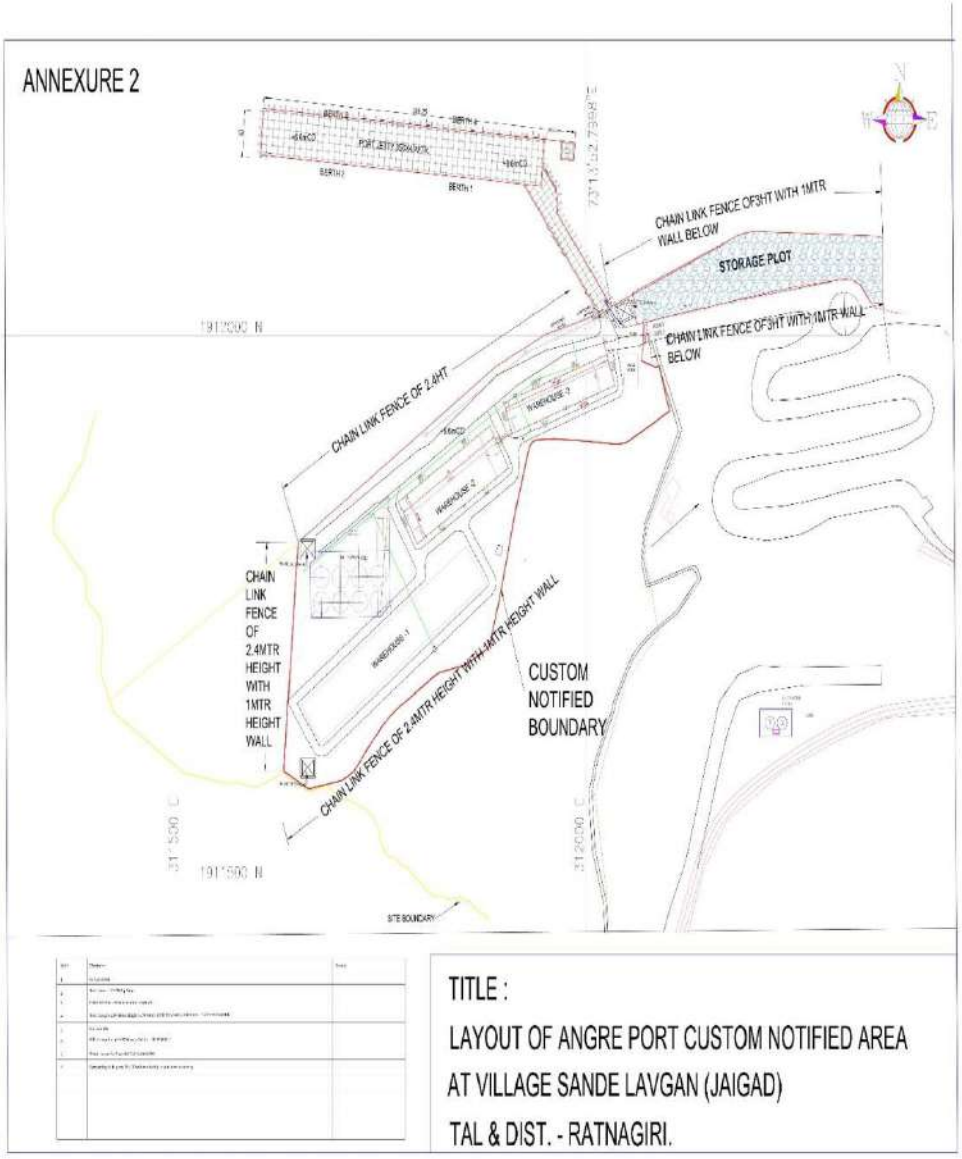
Appendix-01- Organization Chart

Ref page no- 06


PORT HEAD
Direct Reporting – 12
Indirect Reporting - 44
EXECUTIVE
PFSO /HEAD SECURITY
(4)
SECURITY OFFICER – 4 NOS.
3 in shift, 1 on Rotation basis
(14)
HEAD MARINE
DY.PFSO / ASSIST. MGR
PILOTS
RADIO OFFICERS – 3 NOS.
MOORING CREW – 11 NO.
HSE MANAGER.
HEAD OPERATIONS
(9)
HEAD PURCHASE
(1)
SR. OFFICER PURCHASE
TBA INCHARGE WEIGHBRIDGE
HEAD IT
(1)
OFFICER IT
SOFTWARE DEVELOPER
HEAD LOGISTICS
(3)
OFFICER 1 JR ENGR. 1 SUPERVISOR
ACCOUNTS HEAD
(3)
ASSIST. MANAGER
ACCOUNTS OFFICER – 2
MAINT. HEAD
(4)
CIVIL, 3 ELECT. 1 MAINT.1
CR. OPR – 1 TECHNICIAN 1
HEAD HR & IR
(1)
SR. MGR B.D. – 1 MGR B.D - 2
(3)
JETTY INCHARGE
WARE HOUSE INCHARGE
YARD INCHARGE
DISPATCH INCHARGE
WEIGH BRIDGE INCHARGE
ENGINEER - 2 NO.
ENGINEER - 2 NO.
ENGINEER - 2 NO.
MIS IMPORT / EXPORT
WB OPERATOR - 7 NO.
ENGINEER - 2 NO.
ENGINEER - 2 NO.
ENGINEER - 2 NO.

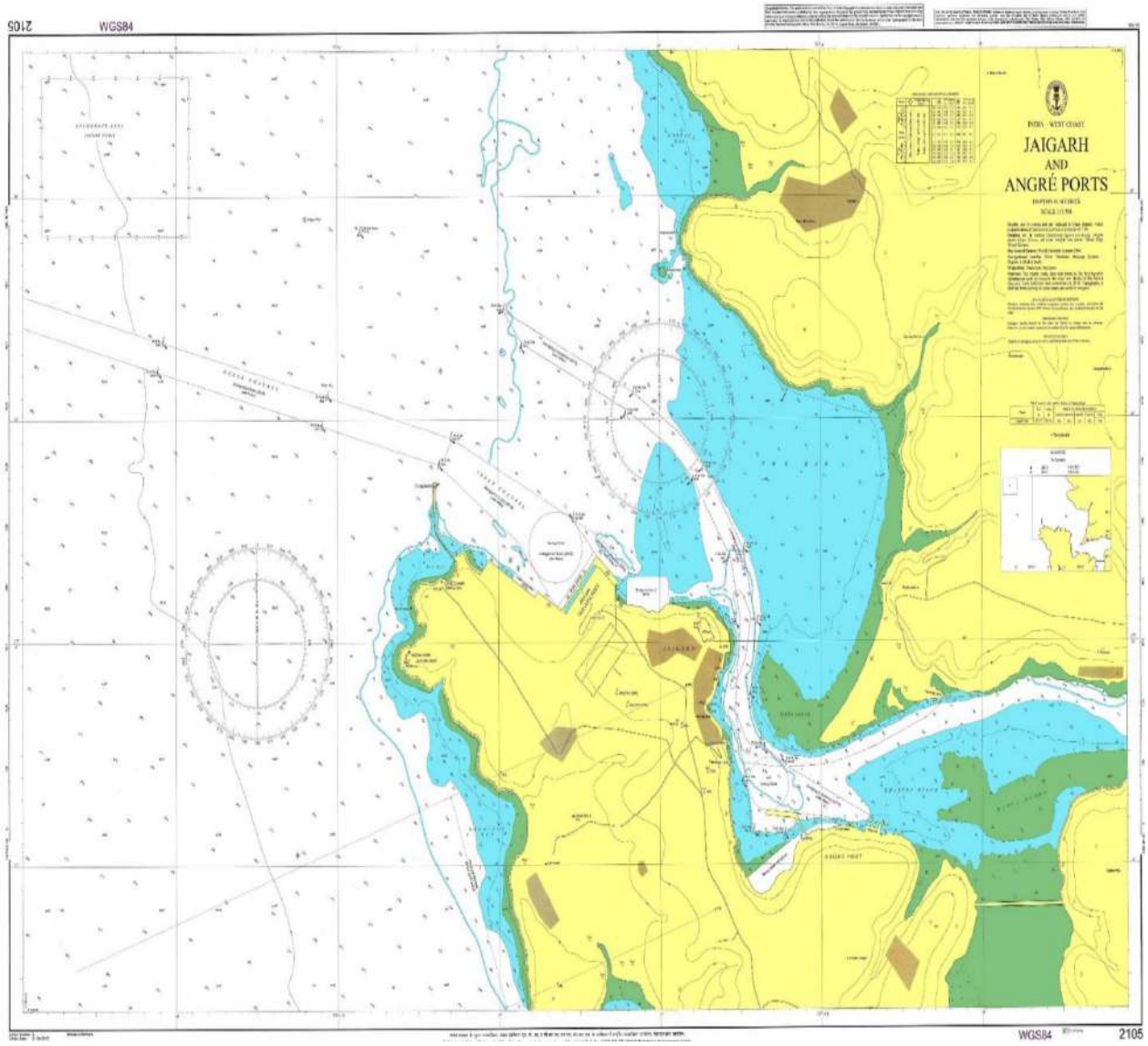
Appendix-02- Port Layout

Ref page no- 15



Appendix-03- Port Navigational Chart

Ref page no- 15



- Berth Location - Latitude- 17° 17’ (N) and Longitude- 073° 14’ (E)
- Designated Anchorage- Latitude-17° 20.54’ (N) and Longitude- 073° 09.17’ (E)

  Latitude-17° 19.82' (N) and Longitude- 073° 09.17' (E)

  Latitude-17° 20.54’ (N) and Longitude- 073° 10.90’ (E)

  Latitude-17° 19.82' (N) and Longitude 073° 10.90' (E)

Jaigad	1. ***Excluding the area of JSW Jaigarh Port Limited and Angre Port Private Limited*** *mentioned in clause 2 and 3 below, all water bound by a line drawn from point*

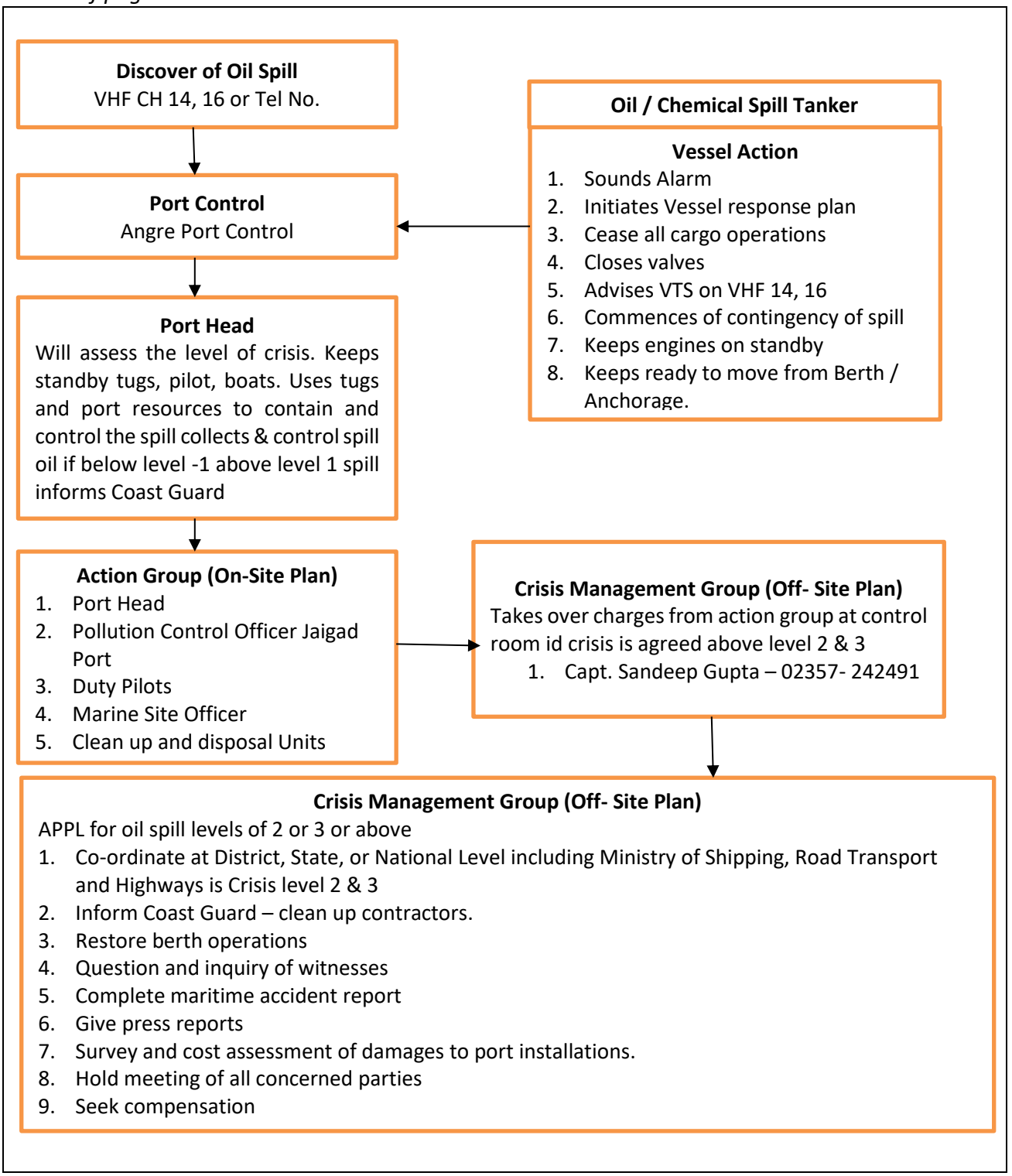
	south of Narvan Bay in position ***(A1)*** *Latitude 17° 20' 00" N, Longitude 73° 13' 19" E, thence westward to the point* ***(B1)*** *Latitude 17° 20' 00" N, Longitude 73° 02' 54" E, thence south westward to the point* ***(C1)*** *Latitude 17° 18' 09" N, Longitude 73° 01' 06" E, thence south eastward to the point* ***(DI)*** *Latitude 17° 16' 0'1" N, Longitude 73° 01' 56" E, thence south eastward to the point* **(EI)** *Latitude 17° 14' 07" N, Longitude 73° 03' 31" E, thence eastward to the north west of village Undi to the point* ***(F1)*** *on coast, Latitude 17° 14' 07" N, Longitude 73° 13' 56" E, from here FILE NO. 5(5)/2017PD-VII Government of India Ministry of Ports, Shipping and Waterways FILE NO. 5(5)/2017PD-VII Page 98 of 325 to the north along the coast including 50 yards landwards from the High Water Mark upto the point* ***(G)*** *Latitude 17° 18' 12" N, Longitude 73° 11' 31" E, thence north westward to the point* ***(F)*** *Latitude 17° 18' 53" N, Longitude 73° 09' 28" E, thence north eastward to the point* ***(E)*** *Latitude 17° 19' 50" N, Longitude 73° 10' 08"E, thence eastward to the point* ***(F2)*** *Latitude 17° 19' 50" N, Longitude 73° 11' 53" E, thence south eastward to the point* ***(G1)*** *Latitude 17° 18' 18" N, Longitude 73° 14' 09" E, thence south westward to the point* ***(H)****Latitude 17° 17' 33" N, Longitude 73° 13' 48" E, thence eastward to the point* ***(H)*** *Latitude 17° 17' 30" N, Longitude 73° 14' 09" E, thence north eastward to the point* ***(I)*** *Latitude 17° 17' 42"N, Longitude 73° 15' 00" E, thence southward to the point* *(M) Latitude 17° 16' 50" N, Longitude 73° 14' 58" E, from here to the south along*

	the coast of Jaigad creek/river on both banks as far as navigable, including 50 yards landwards from the High Water Mark and thence FILE NO. 5(5)/2017PD-VII Government of India Ministry of Ports, Shipping and Waterways FILE NO. 5(5)/2017PD-VII Page 99 of 325 along north bank upto the point (Al) Latitude 17° 20' 00" N, Longitude 73° 13' 19" E. ***2. JSW Jaigarh Port Limited limits** will be, all water bound by a line drawn from point north west of Jaigad Fort in position* ***(A)** Latitude 17° 18' 25" N, Longitude 73° 13' 14" E, thence north westward to the point* ***(B)** Latitude 17°18' 37" N, Longitude 73° '13' 04"E, thence north westward to the point* ***(C)** Latitude 17°18' 51" N, Longitude 73°12' 49"E, thence north westward to the point* ***(D)** Latitude 17°19' 03" N, Longitude 73°12' 24" E, thence north westward to the point* ***(E)** Latitude 17° 19' 50" N, Longitude 73° 10' 08" E, thence south westward to the point* ***(F)** Latitude 17° 18' 53" N, Longitude 73° 09' 28" E, thence south eastward to the point* ***(G)** on coast, Latitude 17° 18' 12" N, Longitude 73°11' 31" E, from here to the east along the coast including 50 yards landwards from High Water Mark up to the point (A)Latitude 17° 18' 25" N, Longitude 73° 13' 14" E, within these limits free navigational passage for all local fishing and non-fishing vessels.*
	*3. **Angre Port Private Limited** limits will be, all water bound by a line drawn from pointnorth west of Jaigad Fort in position* *(A) Latitude 17° 18' 25" N, Longitude 73° 13' 14" E, thence north westward to the*

	point *(B) Latitude 17° 18' 37" N, Longitude 73° 13' 04" E, thence north westward to the point* *(C) Latitude 17° 18' 51" N, Longitude 73° 12' 49" E, thence north westward to the point* *(D) Latitude 17°19' 03" N, Longitude 73° 12' 24" E, thence north westward to the point* *(E) Latitude 170 19' 50" N, Longitude 73° 10' 08" E, thence eastward to the point* *(F2) Latitude 17° 19' 50" N, Longitude 73° 11' 53" E, thence south eastward to the point* *(GI) Latitude 17° 18' 18" N, Longitude 73° 14' 09" E, thence south westward to the point* *(H) Latitude 17° 17' 33" N, Longitude 73°13' 48" E, thence eastward to the point* *(I) Latitude 17° 17' 30" N, Longitude 73° 14' 09" E, thence north eastward to the point* *(K) Latitude 17° 17' 42" N, Longitude 73° 15' 00" E, thence southward to the point* *(M) Latitude 17° 16' 50" N, Longitude 73° 14' 58" E, from here to the north along thecoast, including 50 yards landwards from High Water Mark up to the point* *(A)Latitude 17°18' 25" N, Longitude 73° 13'14" E, excluding MMB jetty, within these limits free navigational passage for all local fishing and non-fishing vessels.*

Appendix- 04- On-Site Plan Chart

Ref page no- 29



Final Measures by the Coast Guard Headquarters Mumbai

Takes over from action group / JPIPL Crisis Management if Spill is above level 2 or more on behalf of government of India National Disaster Management Group

- The Master of the ship shall submit the oil spill report to the port head signed and stamped with the vessel's official seal in the following format.

Appendix- 05- Official Report on Oil Spill From Master

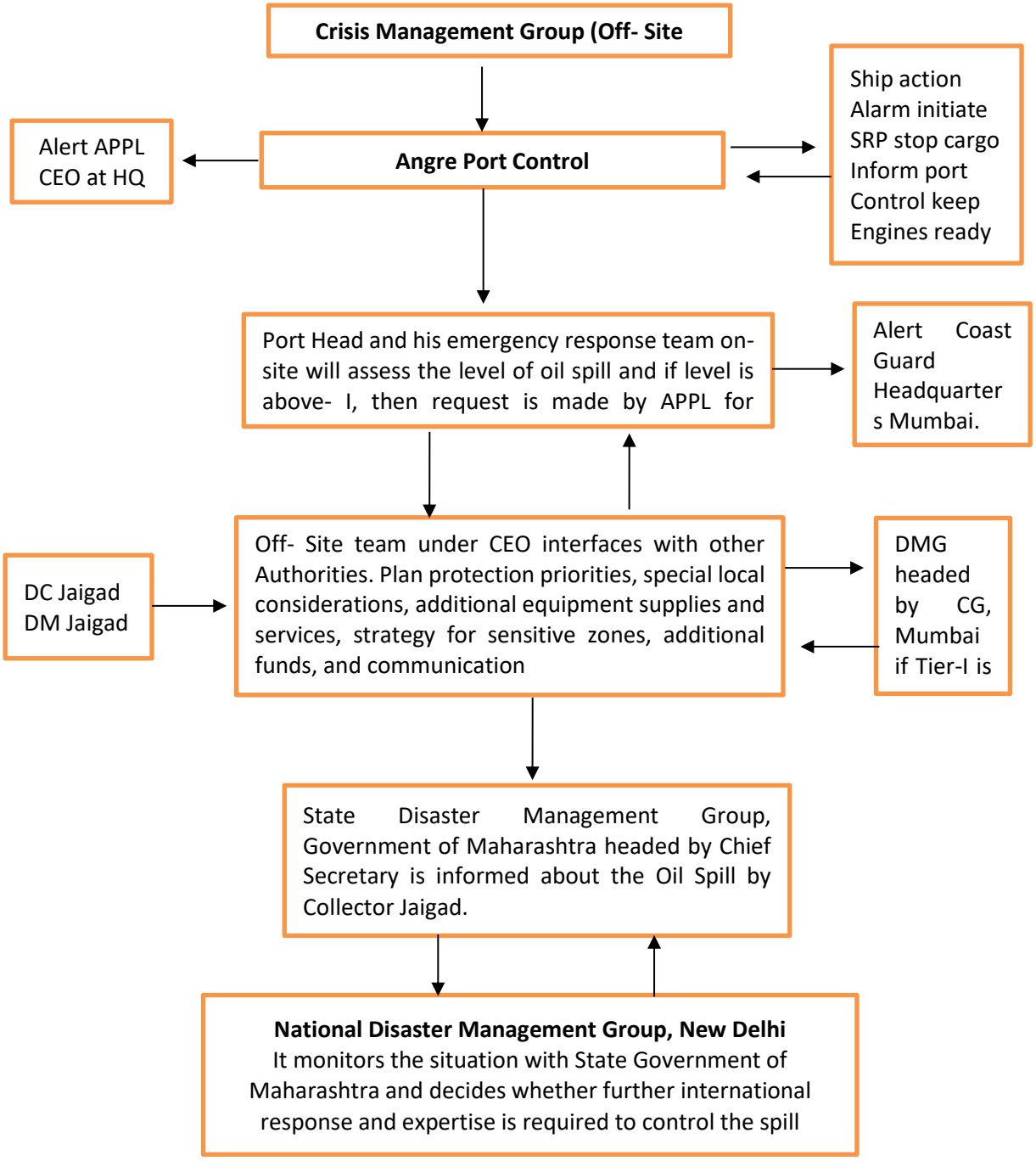
Ref page no- 37

FORMAT

Name of the Ship & IMO No.	**Copy of COFR & Oil Record Book**
Name of the Master	**Date & Time of Spillage**
Call Sign/Flag/Year Built/Class	**Cause of Spillage**
Port of Registry	**Location**
Owner's Name, Address, Fax, Phone, E-Mail	**Type & Quantity Spilled Indicate Tier Level**
Charterer's Name, Address, Fax, Phone, E-Mail	**Immediate Action Taken**
Name of P & I Club	**Weather Conditions**
Local Agents in Port	**Assessment of Help Required**

Appendix- 06- Off- Site Plan

Ref page no- 38



Appendix- 07- Details of Tugs & Other Crafts

Ref page no- 40

Two harbor tugs and a speed boat were wear used at the terminal. The details of the same are given below.

1. **Tug- 1**

Bollard Pull Capacity	-	40 Ton
Speed Maximum	-	10 knots
GRT	-	374

2. **Tug- 2**

Bollard Pull Capacity	-	40 Ton
Speed Maximum	-	8 knots
GRT	-	374

3. **Pilot Boat- 1**

Speed Maximum	-	20 knots
GRT	-	11

Appendix- 08 - Photographs of Sensitive Areas

Ref page no- 44

Port Shore Line

Turning Circle and Sand Bar

Tavasal Jetty and Shastri River Mouth

Jaigad Village, Fishing Harbor and MMB Jetty

Jaigad Fort & Angre Chanel

Appendix- 09 Oil Recycler's - Maharashtra

Ref page no- 44

1. SHREE POOSHP HANS CHEMICALS
   FLOOR 4TH, BLDG NO 28, 403/404,
   DEVKRUPA PREMISES CHS LTD, RAICHUR STREET,
   DANA BUNDER, Mumbai City,
   Maharashtra, 400009

2. M/S SUBHADRA PETROCHEMICALS PVT. LTD.
   PLOT NO. F-2, MIDC, KUPAWAD BLOCK,
   SANGALI- 416 436, MAHARASTRA

3. M/S NORTH EAST LUBRICA PVT. LTD.
   S. NO. 404, ABITGHAR, TALUKA- WADA,
   DIST- THANE- 421 303, MAHARASTRA

4. M/S PATEL PETRO PVT. LTD.
   PLOT NO-04, BEHIND EUROTEX IND,
   MIDC, GOKUL SHIRGAM,
   KOLHAPUR- 411 634, MAHARASTRA

5. M.S VIPRO INDUSTRIES,
   PLOT NO.- D-2/2, MIDC,
   GOKUL SHIRGAM,
   KOLHAPUR- 411 634, MAHARASTRA

6. M/S DEEPAK & COMPANY
   B-20, ROAD NO. 16,
   WAGLE INDL. ESTATES,
   THANE-400 604- MAHARASTRA

7. M/S MEHER PETRO CHEM P. LTD.
   PLOT NO. 17, KPD INDL. EASTATE,
   VILLAGE – HAMARAPUR,
   MANOHAR WADA ROAD,
   DIST- THANE – 421 303- MAHARASTRA

8. OM SAI PETRO SPECIALITIES PVT. LTD.
   PLOT NO. 209, VILLAGE KHAPARI,
   BHIWANDI- WADA ROAD,
   TAL- WADA, DIST- THANE

9. M/S SUBHADRA PETROCHEMICALS PVT. LTD.
   PLOT NO. F-2, MIDC, KUPAWAD BLOCK,
   SANGALI-416 436- MAHARASTRA

10. M/S TAX OIL LUBRICATS PVT, LTD.
    R-591, MIDC INDUSTRIAL AREA,
    RABALE, NAVI MUMBAI- 400 701,
    MAHARASTRA

11. M/S CSRAP MERCHANT
    203/1, CHIKHALI-MOSHI ROAD,
    CHIKHALI. TQ. HAVELI,
    PUNE- 412 114, MAHARASTRA

12. M/S INDUSTRIAL EASTERS & CHEMICALS PVT. LTD.
    MIDC INDUSTRIAL AREA,
    AMBARNATH, DIST- THANE,
    MAHARASTRA

Appendix- 10 Details of Oil Spill Response Equipment's

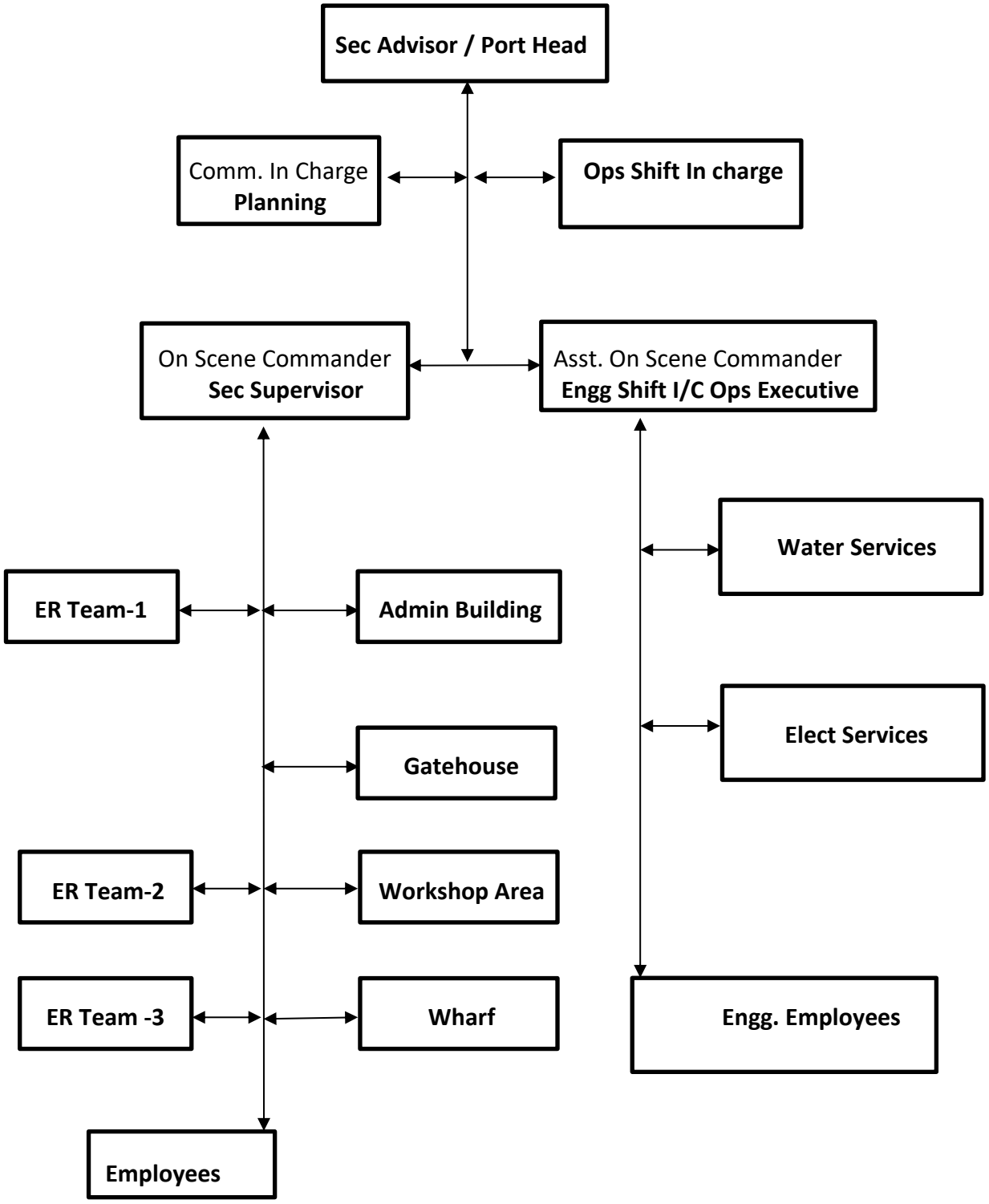
Ref page no- 48

S. No.	Particular	Details of Equipment's / Availability / ECT
1	Present inventory of Oil Pollution Response Equipment's	i. Oil Containment Boom 500 Mtrs ii. Skimmer 1 no. iii. Portable Pump for spraying dispersal from floating crafts iv. Oil Dispersant Chemical
2	Response craft fitted with equipment	i. Pollution control vessel fitted with skimmer. ii. Provision for spraying of chemical dispersants through side drums on both sides. iii. Fitted with equipment to carry containment boom and laying it promptly.
3	Vessels and crafts available for pollution response operation.	i. One Pilot and two mooring boas to spray dispersant by portable pump and to clean harbor water by absorbing pads and mops, etc. ii. Two tugs to two containment boom in tandem. iii. One tug for towing reception barges. iv. One reception barge for storing oily bilge water and recovered oil. v. One multi-purpose barge for receiving oil sludge and debris up to 50 tons.
4	Air capability for spray of dispersants, surveillance and assessment of oil spill as well as response activity.	i. No air effort available with APPL but can be out sourced through Coast Guard if required.
5	APPL organization for pollution control	i. Pollution Control at Jaigad. ii. Cell headed by qualified engineer. iii. Conduct examination of the vessel prior to cargo operations to avoid pollution. iv. Coordinate deployment of equipment to deal with Oil Slick. v. Monitor bunkering operations in the port. vi. Mobilize vessels and personnel for recovery of pollutants.
6	Mutual Aid Agencies with	i. In the process to create a Mutual aid with neighboring terminals and ports in Ratnagiri

	APPL	Region.
7	Angre Port Reception Facilities	i. Registered Re-cyclers available with port for reception facilities.
8	Oil Spill Contingency Plan Updated	i. Plan to be updated at regular intervals.
9	General Information	i. Re-processing and re-cycling of collected spill. ii. Disposal of oily waste, sludge and debris. iii. Cleaning up of beaches. iv. Cleaning up of permanent structure of Port.

Appendix- 11 Emergency Response Organization Chart

Ref page no- 51



Appendix- 12 Training / Safety Schedules and Drill/Exercise Program

Ref page no- 64

The trading head will plan training for every person, who has a role or responsibility in emergency response management, to undertake training for the both offshore and onshore operations.

Propose

To identify in the form of a matrix, the mandatory oil spill response training that Angre Port facility. Jaigad and Ratnagiri personnel's shall undertake to support the Port's Oil Spill Contingency Plan.

The Head Marine in consultation with Head HR-Admin and Port Head shall determine the oil spill training needs and priorities on an annual basis

The OSR training is divided into 3 categories:

Level-1

To provide all field personnel and Supervisor, responsible for undertaking on-site cleanup operations, an overview of the techniques available for recovering spilled oil and clearing polluted shorelines.

Level-2

The middle management level training for senior responders/on-scene commanders/ incident controllers. Supervisor / On-Scene Commander /Incident Controller. To provide senior personnel with the skills necessary to co-operate and supervise response operations, in a timely, organized, and effective manner. This helps personnel to coordinate and supervise response operations, in a timely, organized, and effective manner.

Level-3

Administrators and senior managers, and it provides them the knowledge and understanding needed to take up the response interactions with government, media, and the local community.

These courses are required to meet, both statutory and Angre Port management's requirements for Oil Spill Response preparedness and safe operations. Records indicating that personnel has satisfactorily the designated training course shall be maintained.

In addition to Angre Port employees, Marine Head is to ensure that the designated OSR team personnel for response; the master/skippers, and their crew members of

the ships, barges, and tugs operating for this port are fully trained for effective deployment of OSR equipment.

Appendix- 13 Emergency Contact Numbers

Ref page no- 73

In House Emergency Contact Numbers		
S. No.	**Emergency Contacts**	**Telephone Numbers**
1	Ambulance	+ 91- 9130000744
2	FIRE	+ 91- 9373162092
3	Electrical	+ 91- 8956948312
4	HR & Admin- Head	+ 91- 9373162099
5	HSE	+ 91 - 9561119630
6	Port Head	+ 91- 8625999838
7	Marine Head	+ 91- 9892720377
8	Marine Control Room (Radio Office)	+ 91- 9373162069
9	Cargo Operation Common Number	+ 91- 9373162062
10	PFSO / Port Security Officer	+ 91- 8369623528
11	Dy. PFSO	+ 91- 7720076273
12	Security Common Number	+ 91- 9373162098

Out Door Emergency Contact Numbers		
S. No.	**Emergency Contacts**	**Telephone Numbers**
A	**Fire Brigade Stations**	
1	JSW Fire Station	+ 91 9552577361, 9552577515 +2357-242501-05
2	Ratnagiri Municipality Fire Station	02352-220101 / 238040
3	Finolex Fire Station	02352-238027-30

B	**Ambulance**	
1	Chowgule Ambulance	+91-9146013597
2	JSW Energy & Port	+91-9552577365, 02357-242501-05
C	**Emergency Contact**	
1	Natural Disaster Control Room	1077 / 02352-226248
2	Earthquake Help Line Service	1092
3	Emergency Control	1077
4	Emergency Relief Centre On National Highways	1033
D	**Health & Medical**	
1	District Civil Hospital	02352- 222363
2	Accident Section – Gov. Civil Hospital	02352- 222166
3	Primary Health Center – Khandala	02357- 243475
4	Blood Bank – Civil Hospital	02352- 225616
5	Civil Surgeon	02352- 222363
6	Resident Medical Officer	02352- 222106
7	Superintendent Regional Mental Hospital	02352- 222345
8	Red Cross Society	02352- 223262
E	**Hospitals**	
1	Dr. Lotlikar, Ratnagiri	02352- 221195, +91-9422052209
2	Parkar Hospital, Ratnagiri	02352- 222942 /

		220089
3	Chirayu Hospital, Ratnagiri	02352- 230565 / 230820
4	Dr. Patwardhan, Ratnagiri	02352- 226269
5	Dr. Kamble, Khandala	02357- 243402, +91-942347309
5	Dr. Chintamani Jog	+91-9422382779
F	**Police Station**	
1	Jaigad Police Station	02357- 242233
2	Police Control Room- Ratnagiri	02352- 222222 / 222333
3	RTO, Ratnagiri Helpline	02352- 229444
4	Control Room- Collector, Ratnagiri	02352- 226248 / 222233
5	Superintendent of Police	02352- 225077
6	ADDL, SP	02352- 222245
G	**MMB Port Office**	
1	Port Office- Jaigad	02357- 242224
2	Port Office – Ratnagiri	02352- 222160
H	**Government Services**	
1	Collector & District Magistrate	02352- 222301

2	BSNL Office – Khandala	02357- 243498
3	District Telecom Engineer	02352- 222828
4	MECB Office- Khandala	02357- 243498
5	Superintending Engineer	02352- 220363
6	Head Post Office	02352- 234199
7	Postal Life Insurance CC (PA)	02352- 221247
I	**Transport**	
1	MSRTC Bus Station	02352- 227882
2	CT Bus	02352- 222340
3	Konkan Railway- Ratnagiri	02352- 228951

Appendix- 14 Format of Reports & Logs

Ref page no- 73

A. Daily Incident Log

Daily Incident Log – Team Leader – Oil Spill Response Group

Name …….. Rank ……..

Notification received ON-Shore / Off-shore / Inside Harbor

Time ……. Date ……..

Day …… Shift ……..

Location of The Incident

Name of the Vessel / Place …….. Area ……

Latitude …… Longitude ……..

Distance from Western end Berth …… NM Sounding ……

Incident Occurred

Time …… Date ……. Minor / Major / Tier-I /Tier- II/ Tier- III

Incident Severity (tick one)

Brief details of incident and action taken

……
……
……
……
……

B. Weather Data

Weather Data

Wind Speed …… Wind Direction ……Sea State ……

Current Speed …… Current Direction …… Visibility …….

Sea Temperature ……. Air Temperature …… Fog / Mist ……..

Rain / Precipitation …….. Humidity …… Cold Cover ……..

C. Operation Data

Operation Data

Type of Boom / Boom Deployed …… Total Length …….. In Depth ……

Power Pack Running hrs……. Skimmer Running hrs…….

Oil Recovered from water ……Liters/Tons Oil transferred ashore ……Liters/Tons

Oil/Sludge cleared from shore …….. Kg. Sorbents pads used …….. Nos.

O. S. D. used …….. Litters. Saw Dust Used …… Kg.

D. Logistics and Manpower

Logistics and Manpower

Number and type of Vessel/boats available for assistance ……

Number and type of vehicles available for assistance ……..

Manpower utilized :

Fireman ……. Security men …….. Casual Labours ……. Other …….

On completion, this form is handed over to on séance commander (OSC), who in turn after his comments would hand this form to IC, who, after his comment and initial hand is over to Emergency Control Room (ECR) Team Leader.

From Completed By

Name ……..

Rank / Designation ……

Signature …….

Time …….. Date ……

Appendix- 15 Equipment at the Center

Ref page no- 78

Equipment's at the center	Nos.
Emergency Lights and Torches	2
Computer with Internet	1
Fax Machine	1
Printer	1
Telephone Lines	2
White Board and Color Pen Set	1
Copy of Oil Spill Management plan and DMP	1 Set
Table Sitting and Chair for 10 People	1 Set
Arrangement for Tea and Coffee	Available
WC for Gents and Ladies	1 Each
Isolated Communication In The Main Room	1

Appendix- 16 Oil Spill Report Form

Ref page no- 78

Oil Spill Report Form
Particular of Person / Organization
Reporting Incident Title: ……. Organization: ……. Telephone / Mobile / Fax Number: …… Date / Time: …… Spill Location: …… Type and Quantity of Oil Spill: …….. Cause of Oil Spill: …… Response to Spillage, If Any: …….. Any Other Information: ……..

Appendix- 17 POLREP

Ref page no- 79

POLREP

Address		From……. To …….
Date	Time	Time Group
Identification Serial Number		
Part - I (Polwarn)	1. Date & Time 2. Position 3. Incident 4. Outflow	
Acknowledge	1. Date & Time 2. Position 3. Characteristics of Pollution 4. Source and cause of pollution 5. Wind direction and speed 6. Current or Tide 7. Sea state and pollution 8. Drift of pollution	
Part – II (POLINF)	1. Forecast 2. Identify of observer and ship on the scene 3. Action taken 4. Photographs or samples 5. Names of other agencies informed 6. Spare 7. Acknowledge	
Acknowledge	1. Date and time 2. Request for assistance 3. Coast 4. Pre-arrangements for the delivery 5. Assistance to where and how 6. Other agencies requested	

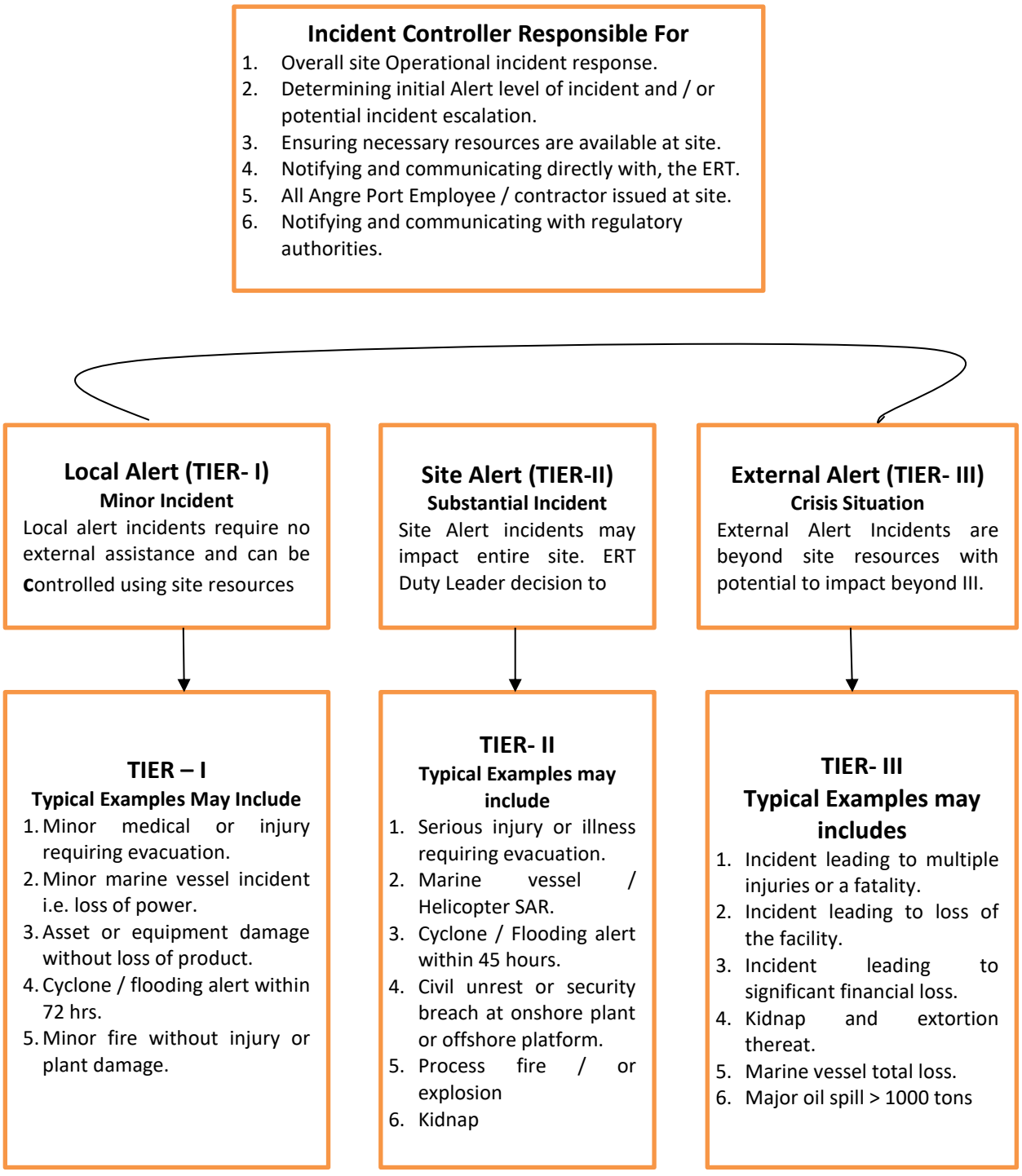
Appendix- 18 Press Release Concept

Ref page no- 80

Initial Press Statement From- Pollution Incident
Public Statement Number 1. An oil spill occurred at ……. hours today at Angre Port, Jaigad- Ratnagiri-Maharashtra within the port limits. The location of the incident is Berth No. …….. / …….. NM ……. From …… of the port. The incident / accident occurred whist the vessel MV ……..was Bunkering / Berthing / Un- Berthing / Leaving Harbor / Entering Harbor / at Anchorage. The situation is UNDER CONTROL / NOT YET UNDER CONTROL / OUT OF CONTROL. The vessel involved in the INCIDENT / ACCIDENT is in a STABLE / UNSTABLE condition. The Oil Spill Response Team IS BEING / HAS ALREADY BEEN mobilized to deal with the situation. So far …… LITERS / TONS of …… oil has been recovered. Weather conditions are described in the area as being VERY POOR / POOR / FAIR / FINE. Sea conditions in the area are said to be SMOOTH / MODARATE / ROUGH / VERY ROUGH / HIGH. Further statement will be issued in light of any further developments. The media departments may contact PRO Ratnagiri, Maharashtra for any additional information. Signature ……. Name of Port Head …….. Date: ……. Time: …….. Place: ……..
Note: when type this from must be signed by the Head Marine and forwarded to Port Head. Under no circumstances the press statement be released to the media without the approval of the concerned authority.

Appendix- 19 TIER wise Response Concept

Ref page no- 80



Annexure – VII

lighted buoys

ANGRÉ PORT

APPL Lighted Buoys For Safety Navigation

Annexure – VIII

Site Photographs

ANGRÉ PORT

APPL Site Photo

ANGRÉ PORT

Safety Signages

ANGRÉ PORT

Cargo Handling

ANGRÉ PORT

Emergency Services

Angre Port STP Plant With 16.5 KLD Capacity

ANGRÉ PORT
THE MOST SHELTERED
ALL WEATHER PORT IN THE KONKAN

Angre Port Air Pollution Control System

ANGRÉ PORT
THE MOST SHELTERED
ALL WEATHER PORT IN THE KONKAN

Fog Cannon On Jetty Area AP-60

Fog Cannon On Cargo Storage Area AP-40

ANGRÉ PORT

BEACH CLEANING

BEACH CLEANING

Tree Plantation at APPL


HB-23

Annexure – IX

Advertisement

तरुण भारत

शनिवार दि. १९ डिसेंबर २००९

सहाशे कोटींच्या चौगुले डॉकयार्डला पर्यावरण मंत्रालयाचा हिरवा कंदील

▶ सुकान्त चक्रदेव / रत्नागिरी

चौगुले पोर्टस् आणि इन्फ्रास्ट्रक्चर कंपनीच्या रत्नागिरी तालुक्यातील जयगड येथील ६०० कोटीच्या ड्राय डॉकयार्डसाठी केंद्रीय पर्यावरण मंत्रालयाने हिरवा कंदील दाखवला असून, प्रकल्प २०११च्या मध्यास पूर्ण होईल.. खासगी क्षेत्रातील या क्षमतेचा हा पहिलाच प्रकल्प कार्यान्वित होणार असल्याची माहिती कंपनीचे मुख्य कार्यकारी अधिकारी अतुल कुलकर्णी यांनी पत्रकारांना दिली.

ते म्हणाले, रत्नागिरी तालुक्यातील जयगड बंदरात समुद्रपातळीपासून दहा हजार डेड वेट टनस् क्षमतेचा हा प्रकल्प उभारण्यात येणार आहे. समुद्राच्या पाण्यातून जहाजाला अतिभव्य यंत्रणेद्वारे उचलून बाहेर काढण्यात येईल आणि जमिनीवर ठेऊन दुरूस्ती आणि देखभाल ही कामे करण्यात येतील. केंद्रीय पर्यावरण मंत्रालयाने गो अहेड असा संदेश दिला आहे. ते म्हणाले, कोणत्याही ठराविक वेळी सहा जहाजे लिफ्टचा उपयोग करू शकतील. अनेक प्रकारची तेले आणि गिअर्स यांचा त्यासाठी वापर करण्यात येईल. सागरी पर्यावरणापासून वेगळे काढून जमिनीवर जहाजांची दुरूस्ती होईल.

२०११ सालच्या मध्यापर्यंत या डॉकयार्डचे काम प्रत्यक्षात सुरू होईल. सध्या या स्वरूपाची कामे मुंबई आणि कांडला येथे होतात. मध्यम प्रतीची कार्गोटर्मिनल ९ दशलक्ष टनापर्यंत जहाजांची कामे पूर्ण करतात. सध्या कंपनी २५५ एकरवर कार्यरत आहे. आणखी भूसंपादनाची आवश्यकता नाही.

तरुण भारत
गुरूवार दि. २१ जानेवारी २०१०

चौगुले कंपनी बंदर प्रकल्पाला केंद्र सरकारचा हिरवा कंदील

दोन-तीन महिन्यात कामाला सुरूवात होणार

▶ रत्नागिरी / प्रतिनिधी

सुमारे ६०० कोटी रूपये गुंतवणुकीच्या बंदर प्रकल्पाला केंद्र सरकारने हिरवा कंदील दाखवल्याची माहिती चौगुले इन्फ्रास्ट्रक्चर अॅण्ड पोर्टसचे जनसंपर्क उपाध्यक्ष रवींद्र आवटी यांनी दिली. ही कंपनी रत्नागिरी तालुक्यातील जयगड येथे बंदर प्रकल्प उभारत आहे.

राज्यातील बंदरांचा विकास खासगीकरणाच्या सहभागातून व्हावा, म्हणून राज्य सरकार प्रयत्नशील आहे. गेली अनेक वर्षे चौगुले उद्योगसमूह जयगडनजीक जहाज दुरूस्तीचा छोटा प्रकल्प चालवत होता. आता याठिकाणी जहाज दुरूस्ती प्रकल्पासोबतच बंदर प्रकल्प उभारण्याचे प्रस्तावित झाले आहे.

या प्रकल्पासाठी योजनेचे सादरीकरण केंद्रीय पर्यावरण मंत्रालयाच्या तज्ज्ञ समितीसमोर झाले. पान १० पहा

चौगुले कंपनी बंदर प्रकल्पाला केंद्र सरकारचा हिरवा कंदील

पान १ वरून

समितीने दिलेल्या संदर्भ चौकटीनुसार प्रकल्प अहवाल तयार झाला. या अहवालावर लोकांचे म्हणणे ऐकून घेण्यात आले. कंपनीला आवश्यक त्या सूचना पर्यावरण हितरक्षणासाठी केंद्र सरकारने दिल्या. आता केंद्र सरकारने बंदर प्रकल्पाला हिरवा कंदील दाखवला. यापूर्वी ड्रायडॉक म्हणजे जहाजांचे कोरडे दुरूस्ती केंद्र चालवण्यासाठी मंजुरी मिळाली आहे. कंपनीचे जनसंपर्क उपाध्यक्ष आवटी यांनी सांगितले, दिल्लीच्या सरकारने ड्रायडॉक आणि बंदर प्रकल्पाला हिरवा कंदील दाखवला आहे. येत्या दोन-तीन महिन्यात प्रकल्पाचे काम सुरू होईल. बंदर प्रकल्पामुळे रोजगारवाढीस मोठी चालना मिळणार आहे.

Annexure – X

Clearance letter was sent to
Group Grampanchayt Kasari &
Group Grampanchayt Sakhar Mohalla.

JAIGAD PORTS INFRASTRUCTURE PRIVATE LIMITED

Regd. Office : Plot No. C-221, MIDC, Behind Finolex Academy of
Management & Technology, Mirjole, Ratnagiri - 415 639
Tel. (02352) 229227, 645890

जेपीआयपील/सीएसआर/६७१

दिनांक : २८.१०.२०१०

प्रति,
मा.मुख्याधिकारी
जि.प.रत्नागिरी
ता.जि.रत्नागिरी

विषय : बंदर प्रकाल्पाला नाहरकत प्रमाणपत्र

महोदय,

मौजे सांडेलावगण येथील प्रस्तावित बंदर प्रकल्पासाठी मिळालेल्या भारत सरकारच्या परवानगीची प्रत (पत्र क्र.No. ११-५५/२००७ - IA.III दिनांक २५.१०.२०१०) आपल्या माहीतीसाठी सोबत पाठवित आहोत.

कळावे

सहकार्याबदद्ल धन्यवाद !

आपला विश्वासू

मोहन पेंडसे
अधिकृत स्वाक्षरीधारक

प्रत :
१) मा.सरपंच
ग्रुप ग्रामपंचायत कासारी -सांडेलावगण
ता.जि.रत्नागिरी

२) मा.सरपंच
ग्रामपंचायत साखरमोहल्ला
ता.जि.रत्नागिरी

Received
30/10/2010

सरपंच
ग्रुप ग्रामपंचायत कासारी-
सांडेलावगण, ता.जि.रत्नागिरी.

Annexure – XI

Environmental Safeguards

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

AMBIENT AIR QUALITY MONITORING ANALYSIS REPORT

Report No.	: HALPL/REP/25-26/1661/1
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE

RESULTS

SR. NO.	TEST DESCRIPTION	UNIT	READINGS	NAAQS STANDARDS	METHOD OF SAMPLING AND ANALYSIS
01	DATE OF SAMPLING	DD/MM/YY	23&24/12/2025		
02	TEST LOCATION		On Jetty Area		
03	TIME OF SAMPLING	Hrs	09:00		
04	TEMPERATURE (Max./Min)	Deg C	32/23		
05	RELATIVE HUMIDITY	% RH	47		
06	SAMPLING DURATION	Hrs	24		
07	RESPIRABLE SUSPENDED PARTICULATE MATTER (PM_{10})	µg/m³	37.50	≤100	IS 5182 (Part 23)
08	FINE PARTICULATE MATTER ($PM_{2.5}$)	µg/m³	28.90	≤60	IS 5182 (Part 24)
09	SULPHUR DIOXIDE AS SO_2	µg/m³	BDL (<10)	≤80	IS 5182 (Part 2): Sec.1
10	NITROGEN DIOXIDE AS NO_2	µg/m³	11.10	≤80	IS 5182 (Part 6)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Polltech make PEM-ADS 2.5µ/10µ,Sr.No 16113	PICS/ET/ADS/03-25/01	16/03/2025	15/03/2026
2	Respirable Dust Sampler; Sr.No.09	TECH/CAL/2025/06.M/18	04/06/2025	03/06/2026

REMARK/OBSERVATIONS:

NAAQS – National Ambient Air Quality Standards (2009)

BDL- Below Detectable Lavel.

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

AMBIENT AIR QUALITY MONITORING ANALYSIS REPORT

Report No.	: HALPL/REP/25-26/1661/2
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE

RESULTS

SR. NO.	TEST DESCRIPTION	UNIT	READINGS	NAAQS STANDARDS	METHOD OF SAMPLING AND ANALYSIS
01	DATE OF SAMPLING	DD/MM/YY	23&24/12/2025		
02	TEST LOCATION		Near Gate no.3		
03	TIME OF SAMPLING	Hrs	09:30		
04	TEMPERATURE (Max./Min)	Deg C	32/23		
05	RELATIVE HUMIDITY	% RH	47		
06	SAMPLING DURATION	Hrs	24		
07	RESPIRABLE SUSPENDED PARTICULATE MATTER (PM_{10})	µg/m³	37.20	≤100	IS 5182 (Part 23)
08	FINE PARTICULATE MATTER ($PM_{2.5}$)	µg/m³	17.90	≤60	IS 5182 (Part 24)
09	SULPHUR DIOXIDE AS SO_2	µg/m³	BDL(<10)	≤80	IS 5182 (Part 2): Sec.1
10	NITROGEN DIOXIDE AS NO_2	µg/m³	11.50	≤80	IS 5182 (Part 6)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Polltech make PEM-ADS 2.5µ/10µ,Sr.No.12212	PICS/ ADS /03-25/ET/045	17/03/2025	17/03/206
2	Respirable Dust Sampler; Sr.No.04	TECH/CAL/2025/06.M/7	04/06/2025	03/06/2026

REMARK/OBSERVATIONS:
NAAQS – National Ambient Air Quality Standards (2009)
BDL- Below Detectable Lavel.

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

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• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

AMBIENT AIR QUALITY MONITORING ANALYSIS REPORT

Report No.	: HALPL/REP/25-26/1661/3
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE

RESULTS

SR. NO.	TEST DESCRIPTION	UNIT	READINGS	NAAQS STANDARDS	METHOD OF SAMPLING AND ANALYSIS
01	DATE OF SAMPLING	DD/MM/YY	24&25/12/2025		
02	TEST LOCATION		Near Wear House		
03	TIME OF SAMPLING	Hrs	09:30		
04	TEMPERATURE (Max./Min)	Deg C	33/24		
05	RELATIVE HUMIDITY	% RH	45		
06	SAMPLING DURATION	Hrs	24		
07	RESPIRABLE SUSPENDED PARTICULATE MATTER (PM_{10})	µg/m³	39.70	≤100	IS 5182 (Part 23)
08	FINE PARTICULATE MATTER ($PM_{2.5}$)	µg/m³	26.20	≤60	IS 5182 (Part 24)
09	SULPHUR DIOXIDE AS SO_2	µg/m³	BDL(<10)	≤80	IS 5182 (Part 2): Sec.1
10	NITROGEN DIOXIDE AS NO_2	µg/m³	14.70	≤80	IS 5182 (Part 6)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Polltech make PEM-ADS 2.5µ/10µ,Sr.No 16113	PICS/ET/ADS/03-25/01	16/03/2025	15/03/2026
2	Respirable Dust Sampler; Sr.No.09	TECH/CAL/2025/06.M/18	04/06/2025	03/06/2026

REMARK/OBSERVATIONS:
NAAQS – National Ambient Air Quality Standards (2009)
BDL- Below Detectable Lavel.

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

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• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

AMBIENT AIR QUALITY MONITORING ANALYSIS REPORT

Report No.	: HALPL/REP/25-26/1661/4
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE

RESULTS

SR. NO.	TEST DESCRIPTION	UNIT	READINGS	NAAQS STANDARDS	METHOD OF SAMPLING AND ANALYSIS
01	DATE OF SAMPLING	DD/MM/YY	24&25/12/2025		
02	TEST LOCATION		Near Administer Office		
03	TIME OF SAMPLING	Hrs	10:00		
04	TEMPERATURE (Max./Min)	Deg C	33/24		
05	RELATIVE HUMIDITY	% RH	45		
06	SAMPLING DURATION	Hrs	24		
07	RESPIRABLE SUSPENDED PARTICULATE MATTER (PM_{10})	µg/m³	35.30	≤100	IS 5182 (Part 23)
08	FINE PARTICULATE MATTER ($PM_{2.5}$)	µg/m³	17.10	≤60	IS 5182 (Part 24)
09	SULPHUR DIOXIDE AS SO_2	µg/m³	BDL(<10)	≤80	IS 5182 (Part 2): Sec.1
10	NITROGEN DIOXIDE AS NO_2	µg/m³	12.20	≤80	IS 5182 (Part 6)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Polltech make PEM-ADS 2.5µ/10µ,Sr.No.12212	PICS/ ADS /03-25/ET/045	17/03/2025	17/03/2026
2	Respirable Dust Sampler; Sr.No.04	TECH/CAL/2025/06.M/7	04/06/2025	03/06/2026

REMARK/OBSERVATIONS:
NAAQS – National Ambient Air Quality Standards (2009)
BDL- Below Detectable Lavel.

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.

• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

STACK EMISSION MONITORING REPORT

Report No.	: HALPL/REP/25-26/1661/5
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE

RESULTS

SR. NO.	DESCRIPTION	UNIT	RESULT	LIMITS	Methods Used
01	DATE OF SAMPLING	DD/MM/YY	23/12/2025		
02	TEST LOCATION		D.G. Set (750 KVA)		
03	TIME OF SAMPLING (00.00)	Hrs	10:45		
04	MATERIAL OF STACK		-		
05	STACK HEIGHT (AGL)	Mtr	13.0		
06	TYPE OF FUEL USED	--	H.S.D.		
07	FUEL CONSUMPTION	Litres/hr	40.0		
08	TYPE OF STACK		Round		
09	FLUE GAS TEMPERATURE	Deg C	208		
10	VELOCITY	M/Sec	14.16		
11	DIAMETER OF STACK	M	0.15		
12	GAS VOLUME	Nm^3/Hr	557.36		
13	PARTICULATE MATTER AS PM	mg/Nm^3	42.60	As per Consent	IS 11255 (Part 1)
14	SULPHUR DIOXIDE AS SO_2	Kg/Day	1.10	As per Consent	IS 11255 (Part 2)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	PEM-SMK 10M, Sr. No.7614	PICS/SMK/03-25/ET/052	18/03/2025	18/03/2026

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

AMBIENT NOISE LEVEL MONITORING REPORT

Report No.	: HALPL/REP/25-26/1661/6
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE
Date of Sampling	: 23/12/2025

RESULTS

SR. NO.	TEST LOCATION	UNIT	DAY TIME	NIGHT TIME
			Readings	Readings
01	Near Ware House	dB (A)	65.7	62.3
02	Near Jetty Area	dB (A)	70.0	64.5
03	Near Gate No. 3	dB (A)	65.4	60.6

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Digital Sound level meter Lutron -SL.4030SR.Q633367	TECH/CAL/2025/02.C/1	13/02/2025	12/02/2026

Limits:
≤75 dB (A) For Day Time
≤70 dB (A) For Night Time

REMARK/OBSERVATIONS:

Noise levels limits are given as per Noise Pollution (Regulation & Control) Rules 2000.

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

D.G. NOISE LEVEL MONITORING REPORT

Report No.	: HALPL/REP/25-26/1661/7
Dated	: 31/12/2025
Inward No.	: SK-0748
Inward Date	: 26/12/2025
Client	: **M/S ANGRE PORT PVT. LTD.**
Site	: VILLAGE SANDE LAVGAN, POST – JAIGAD, RATNAGIRI – 415614.
Sample Collected by	: M/S. SHRUSTI ENVIROCARE
Date of Sampling	: 23/12/2025

RESULTS

SR. NO.	DESCRIPTION	UNIT	RESULTS			
			At 0.5 m from the Open acoustic	At 0.5 m from the Close acoustic	Insertion Loss	Standard
01	DG Set 750 KVA	dB(A)	97.2	71.7	25.5	More than 25 dB(A)

Calibrations details: -

Sr. No.	Instrument	Certificate No.	Last Calibrated on	Due Date
1	Digital Sound level meter Lutron -SL.4030SR.Q633367	TECH/CAL/2025/02.C/1	13/02/2025	12/02/2026

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Test Report****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

ANALYSIS REPORT

HALPL/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS		
M/s. Angre Port Pvt. Ltd. Village-SandeLavgan, Post -Jaigad, Ratnagiri – 415614.	**REPORT NO**	HALPL/LAB/WA/04467
	REPORT DATE	27/12/2025
	LAB REFERENCE NO.	HALPL/LAB/WA/1803
	SAMPLING DATE	23/12/2025
	SAMPLE RECEIPT DATE	24/12/2025
	START DATE OF ANALYSIS	24/12/2025
	END DATE OF ANALYSIS	27/12/2025

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Domestic Waste Water	M/s. Shrusti Envirocare	Untreated	STP

RESULTS OF ANALYSIS

SR NO	DESCRIPTION	UNIT	RESULT	TEST METHOD
01	Total Suspended Solids	mg/L	28.00	APHA 24th Ed 2023, 2540 D
02	Chemical Oxygen Demand	mg/L	56.00	APHA 24th Ed 2023, 5220 C
03	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	29.50	IS 3025 (Part 44)
04	Free Residual Chlorine	mg/L	1.00	APHA 24th Ed 2023, 4500 Cl B

Sr. No.	Equipment / Instrument	Last calibration	Calibration valid	Certificate No.
1	pH Meter Make- Global	08/05/2025	07/05/2026	E25/10/5/30451/01
2	Hot Air Oven –Make- BTI	08/05/2025	07/05/2026	T25/05/5/30451/21
3	COD Digester –Make- Rocker CR-25	08/05/2025	07/05/2026	T25/05/5/30451/13
4	BOD Incubator –Make –BTI-06	08/05/2025	07/05/2026	T25/05/5/30451/10
5	Water Bath–Make-Bio technics	08/05/2025	07/05/2026	T25/05/5/30451/11
6	Weighing balance- Make- Shimadzu AUW220D	26/09/2025	25/09/2026	M25/40/9/32211/01

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Report ****

HORIZON SERVICES
Analytical Laboratory

Lab Approved by MoEF, New Delhi. (Valid till 06/03/2026)

"Shree", K 3/4, S. No. 10, Erandawane Housing Society, Opposite Deenanath Mangeshkar Hospital, Pune 411 004.
• Mob.: 7249867318, 8378018710 • Email : kmn@hespl.co.in / md@hespl.co.in • www.hespl.co.in

ANALYSIS REPORT

HALPL/LAB/NABL/F/7.8.2.1

CLIENT'S NAME & ADDRESS		
M/s. Angre Port Pvt. Ltd. Village-SandeLavgan, Post -Jaigad, Ratnagiri – 415614.	**REPORT NO**	HALPL/LAB/WA/04468
	REPORT DATE	27/12/2025
	LAB REFERENCE NO.	HALPL/LAB/WA/1803
	SAMPLING DATE	23/12/2025
	SAMPLE RECEIPT DATE	24/12/2025
	START DATE OF ANALYSIS	24/12/2025
	END DATE OF ANALYSIS	27/12/2025

DETAILS OF SAMPLE	SAMPLE COLLECTED BY	NATURE	LOCATION
Domestic Waste Water	M/s. Shrusti Envirocare	Treated	STP

RESULTS OF ANALYSIS

SR NO	DESCRIPTION	UNIT	RESULT	LIMITS	TEST METHOD
01	Total Suspended Solids	mg/L	8.00	<10.00	APHA 24th Ed 2023, 2540 D
02	Chemical Oxygen Demand	mg/L	24.50	<50.00	APHA 24th Ed 2023, 5220 C
03	Biochemical Oxygen Demand (27°C for 3 days)	mg/L	6.80	<10.00	IS 3025 (Part 44)
04	Free Residual Chlorine	mg/L	0.20	<1.00	APHA 24th Ed 2023, 4500 Cl B

Sr. No.	Equipment / Instrument	Last calibration	Calibration valid	Certificate No.
1	pH Meter Make- Global	08/05/2025	07/05/2026	E25/10/5/30451/01
2	Hot Air Oven –Make- BTI	08/05/2025	07/05/2026	T25/05/5/30451/21
3	COD Digester –Make- Rocker CR-25	08/05/2025	07/05/2026	T25/05/5/30451/13
4	BOD Incubator –Make –BTI-06	08/05/2025	07/05/2026	T25/05/5/30451/10
5	Water Bath–Make-Bio technics	08/05/2025	07/05/2026	T25/05/5/30451/11
6	Weighing balance- Make- Shimadzu AUW220D	26/09/2025	25/09/2026	M25/40/9/32211/01

For **HORIZON SERVICES**

MANISHA NARGOLKAR
(Lab Incharge)

****End of Report ****

Annexure – XII

Form-V

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2025

Unique Application Number	***Submitted Date***
MPCB-ENVIRONMENT_STATEMENT-0000079927	30-06-2025

PART A

Company Information

Company Name	***Application UAN number***	
Angre Port Private Limited	MPCB CONSENT-0000219659	
Address		
Village Sande Lavgan Post Jaigad Taluka & District Ratnagiri 415614		
Plot no	***Taluka***	***Village***
39/5	Ratnagiri	Sande Lavgan
Capital Investment (In lakhs)	***Scale***	***City***
499.54	LSI	Ratnagiri
Pincode	***Person Name***	***Designation***
415614	Vikram Singh	Executive - HSE
Telephone Number	***Fax Number***	***Email***
9561119630	02357242494	Safety@angreport.in
Region	***Industry Category***	***Industry Type***
SRO-Ratnagiri	Red	R46 Ports and harbour, jetties and dredging operations
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	Format1.0/CAC/UAN No.MPCB CONSENT-0000219659/CR/2412000173	2024-12-03
Consent Valid Upto	***Establishment Year***	***Date of last environment statement submitted***
2027-09-30	2013	Aug 20 2024 12:00:00:000AM
Industry Category Primary (STC Code) & Secondary (STC Code)		

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
Sugar (Raw Finished)	1000000	0	MT/A
Contanerized Product such as horticulture	50000	0	Ton/Y
Marine products	200000	0	Ton/Y
Electronics Goods	100000	0	Ton/Y
Automobile component (Without Ship Breaking Activity)	100000	0	Ton/Y
Caustic Soda	50000	0	Ton/Y

Sugar Allied product like liquid sugar, molasses, Ethanol.RS ETC	250000	0	MT/A
Oil such as edible oil like sunflower, palm, RBD, COP etc and industrial oil like Furnace/base oil, Carbon block oil etc.	350000	0	Ton/Y
Acid such as sulphuric Formic, Succinic acid etc.	100000	0	Ton/Y
Organic / Inorganic solvents,	100000	0	Ton/Y
Steel, Copper, Coils, Wires and Ropes	1500000	0	Ton/Y
Handling of coal	2200000	0	MT/A

By-product Information

By Product Name	Consent Quantity	Actual Quantity	UOM
NA	0	0	Nos./Y

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	0.00	0.00
Cooling	50.00	12.00
Domestic	10.00	7.00
All others	5.00	3.00
Total	65.00	22.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Sewage effluent	8	5	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
NA	0	0	Ltr/A

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
NA	0	0	Ltr/A

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
HSD	300	1.96	Ltr/Hr

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
NA	0	0	NA	NA	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
SO2	11.40	0	NA	80	NA
NO2	13.70	0	NA	80	NA
PM10	38.50	0	NA	100	NA
PM2.5	18.50	0	NA	60	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0	0	Kg/Annum

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg/Annum

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	Kg/Annum

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	Kg/Annum

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg/Annum
0	0	0	Kg/Annum

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0	Kg/Annum	NA

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	Kg/Annum	NA

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
NA	0	0	0	0	0	0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
AIR POLLUTION CONTROL SYSTEM	ELIMINATE AIR POLLUTION	1300000

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
TREE PLANTATION	ENVIRONMENT PROTECTION REDUCE CO2 EMISSION	100000
AIR POLLUTION CONTROL SYSTEM	ENVIRONMENT PROTECTION REDUCE CO2 EMISSION	150000

Part-I

Any other particulars for improving the quality of the environment.

Particulars

NA

Name & Designation

Vikram Singh Executive - HSE

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000079927

Submitted On:

30-06-2025