

The Dhamra Port Company Limited

(A joint venture of L & T and Tata Steel)

Second Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar - 751023.

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Santosh K. Mohapatra, IAS (Retd)

CEO

25th January, 2012

The Chief Conservator of Forests
Ministry of Environment and Forests
Government of India, Eastern Regional Office
A/3, Chandrasekharpur
Bhubaneswar – 751023

Sub: Half Yearly Compliance Report of Dhamra Port
Expansion Project at Village Dosinga, Chandbali
Tehsil, Bhadrak District of Odisha

Ref: Letter No. PD/26017/8/98-PDZ (CRZ) Dated 4th
January, 2000 of Govt. of India, Ministry of Surface
Transport (MoST)

Dear Sir,

The Half Yearly Compliance Report of Dhamra Port Expansion
Project for the period from April to September, 2011 is submitted
herewith in both hard & soft copy.

Thanking you,

Yours Sincerely

(Santosh K Mohapatra)

COMPLIANCE REPORT

| | |
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| Name of the Project | Expansion of Dhamra Port Company Limited, Located at Village Dosinga, Tehsil Chandbali, Bhadrak District of Odisha |
| Environmental Clearance Letter No. | Letter No. PD/26017/8/98-PDZ (CRZ) Dated 4 th January, 2000 of MoST For Cargo Handling Capacity of 25 MTPA |
| Period of Compliance Report | April to September, 2011 |

Conditions & Compliance of Environment Clearance

| Si. No. | Environment Clearance Conditions | Compliances |
|----------------|---|---|
| i) | <i>All Construction design/drawings relating to construction activities must have the approval of the concerned Government Departments/Agencies of the State Government of Odisha.</i> <i>Ground water should not be tapped for construction activities as the drawl of ground water for industrial use from the CRZ area is a prohibited activity.</i> | All drawing and designs have the approval of the State Government of Odisha, vide letter no No. DPP-4/07.1331/Com dtd 19.2.2007 and Memo no 1153/Com. Dtd 14.2.2007 of Commerce & Transport Dept. Ground water is not drawn for constructional activities. DPCL uses water drawn from Matai river & stored in its reservoir both for construction & operational purpose. |
| ii) | <i>Adequate provision for all infrastructural facilities such as water supply, fuel, sanitation etc. must be extended for laborers during the construction period in order to avoid damage to the environment.</i> | The facilities such as water supply, fuel, sanitation etc. for laborers have been provided by all firms engaged for construction & operation facility in the port. |
| iii) | <i>Dredging operations if any, should be undertaken in consultation with either the Central Water and Power Research Station, Pune or National Institute of Oceanography, Goa or any other authorized agency to ensure that dredging operations do not cause adverse impact on water quality and marine productivity in the vicinity. Dredging operation as far as possible should be kept to the minimum for avoiding any adverse impact on marine</i> | NIO, Goa was engaged to study the impact of dredging operations & advise the company accordingly. The dredging has been executed under the expert guidance of IUCN to ensure conservation of marine life. The IMMT, Bhubaneswar has been monitoring the air, water and biological parameters both in marine & terrestrial environment regularly. |

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| | <i>life.</i> | |
| iv) | <i>Disposal sites for excavated material should be so designed that the revised land use after dumping and changes in the land use pattern do no interfere with the natural drainage.</i> | DPCL has ensured that the change in land use pattern do not interfere in the natural drainage. The natural drainage, existing earlier has been maintained. |
| v) | <i>To meet with any emergency situation, adequate foam containers should be kept ready with supporting fire fighting system and water pipeline.</i> | DPCL has prepared & implemented the Disaster Management Plan, Health and Safety Management Plan & firefighting plans. Adequate safety equipments, foam containers, fire extinguishers have been kept at strategic points to ensure safety. |
| vi) | <i>Staff posted in sensitive areas should be trained in implementation of the Crisis Management Plan already drawn by the authorities. Mock Drill(s) for this purpose should be conducted on a regular basis. Provisions of Dock Safety Act and the Guidelines issued by the DG, FASLI/CLI, Mumbai for the safety and health of the workers should be followed.</i> | <p>The employees of DPCL have been trained on safety guidelines.</p> <p>Regular Mock Drills are conducted as per the Crisis Management plans. The Drill & Safety Performance Report is monitored by the EHS Department. The said reports for the period from July to November are enclosed in Annexure VI.</p> |
| vii) | <i>For development of Green Buffer including mangroves wherever feasible, the authorities should start growing large nursery of multipurpose species such as Eucalyptus, Casuarina, Dalbergia, Terminalia etc. The norm of about 2000-2500 trees per Hectare may be adopted for raising of green belt. Necessary permission may be obtained for cutting of trees, if any, for the project</i> | <p>A large nursery of multipurpose species has been established for raising quality planting material for the green belt. Green belt has been developed in the port site & along the 62 km Railway corridor. Strip plantation on both the edges of railway corridor has been taken up & 1, 60,000 plants have been planted along the north & south edges of the corridor. Plantation of suitable species has been taken up in and around the port bulb and admin/Residential area with effect from 2010 & is continuing. So far 1, 00,000 plants suitable for the site have been planted. Details regarding plant species & cost have been furnished at Annexure-III A.</p> <p>Necessary permission for felling of 267 miscellaneous trees has been obtained</p> |

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| | | from the competent authority from the forest department & handed over to Odisha Forest development Corporation for felling & disposal. |
| viii) | <i>To prevent discharge of sewage and other liquid wastes including ballast into marine environment, adequate system for collection, treatment and disposal of liquid wastes must be provided to the satisfaction of the Odisha Pollution Control Board, Bhubaneswar</i> | DPCL has installed a sewage treatment plant to handle 140 KLD of sewage per day. DPCL's sewage treatment/waste disposal system is in accordance to the prescribed discharge standards. For treatment & disposal of liquid waste & ballast authorized agencies have been engaged by DPCL. |
| ix) | <i>Adequate noise control must be provided to noise levels at various work places within the standard prescribed by the competent authorities. If need be, ear plugs and ear muffs should be provided to the workers in the project area</i> | This has been followed at the work sites both on shore and off shore. Noise monitoring at site is being done by IMMT. |
| x) | <i>The quality of treated effluents, solid wastes and emissions must confirm to the standards laid down by the competent authority including State Pollution Control Board, Govt. of Odisha, Bhubaneswar</i> | DPCL's sewage treatment /waste disposal system is confirming to the standards laid down by Odisha State Pollution Control Board (OSPCB) |
| xi) | <i>An Environmental Cell should be set up immediately and made operational with adequate laboratory facilities, equipments and a mobile van for collecting air samples. The record and data should be submitted with proper analysis and corrective measures required, if any, for maintaining the levels within the prescribed limits to the Eastern Regional Office, Ministry of Environment & Forests, Govt of India, Bhubaneswar. The Environment Cell should coordinate and monitor environmental mitigative measures executed in the project area. The Project Proponent is advised to</i> | <p>Environment Cell has been constituted consisting of an EHS Manager, Asst. Manager, Junior manager, 5 other Chemists & Operators. DPCL is having a Full fledged Laboratory Facility with all required instruments for regular environmental monitoring. The order constituting the Environmental Monitoring Cell & list of instruments installed is enclosed at Annexure – IV.</p> <p>The CSIR body, IMMT Bhubaneswar is regularly conducting environmental monitoring for the project.</p> |

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| | <i>institutionalize their Environmental Monitoring through some recognized Scientific Institution for the project.</i> | |
| xii) | <i>Necessary leakage detection devices with early warning system must be provided at strategic locations</i> | Leakage detection devices with early warning system have been provided at all strategic locations. |
| xiii) | <i>Standby DG sets must be provided to ensure uninterrupted power supply (to) the pump house and the fire fighting system</i> | 7 DG Sets covered with acoustic enclosure have been installed at site for emergency backups & uninterrupted power supply at the work site which includes the water supply system and fire fighting system |
| xiv) | <i>Third party inspection should be ensured during the construction and operational phases with adequate insurance cover. The Project authorities should confirm on regular intervals of six months to the Ministry about the implementation of the suggested safeguard measures and the data/report should be opened for inspection by the Team which would be constituted by the Ministry, If found necessary</i> | Third party inspection is conducted through IMMT, Bhubaneswar a CSIR Body. Six monthly reports are regularly submitted to the Eastern Regional Office of the MoEF, Bhubaneswar. |
| xv) | <i>Full support should be extended to the Eastern Regional Office, Ministry of Environment & Forests, Govt of India, Bhubaneswar during inspection of the project for monitoring purposes by the project proponents by furnishing full details and action plans including action taken report on mitigative measures.</i> | Full support is always extended to the Eastern Regional Office, Ministry of Environment & Forests, Bhubaneswar for the inspection of the Project. All the details and ATR are submitted as and when required by the Ministry. |
| xvi) | <i>Adequate funding provisions, year-wise and item-wise, must be made for implementation of the above mentioned safeguard measures.</i> | Adequate funding has been provided for the implementation of all safeguard measures. The actual expenditure incurred on the project so far is INR 3276 Cr. Out of this INR 38.99 Cr has been expended for implementing environmental management Plan from Yr 2008-11. Details of item & year wise fund allocation break up are enclosed at Annexure-I. |

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| xvii) | <i>The Rapid Environmental Impact Assessment Studies for the construction of the above project by M/s Kirloskar Consultants Ltd. should be expedited. The project proponent was advised to keep in mind the proneness of the coast of Odisha to sever cyclonic storms while going ahead with their project</i> | The Rapid Environmental Impact Assessment Study has been conducted in time & the said report has been submitted. DPCL has already formulated detailed Disaster Preparedness & Management Plan to handle any natural calamities such as cyclones, storms, quakes etc., along the Coast. |
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Conditions & Compliance of National Environment

Appellate Authority Judgement of the year 2000

| Sl. No. | Conditions of the National Environment Appellate Authority Judgement of the year 2000 | Compliances |
|---------|--|---|
| 1) | <i>Mangrove patch of 200 plants, to be excluded from the project area, fencing & maintenance to be done by project proponent</i> | The area is excluded from any project activity and fenced for conservation of the Mangrove. |
| 2) | Constitution of Environment Monitoring Committee | Constituted by the State Government on 14 th January 2008. |

Annexure-I

**Ministry of Environment & Forests
Regional Office
BHUBANESWAR
Monitoring Report
Part-I**

DATA-SHEET

1. Project type: River-valley/Mining : Expansion of Port.
Industry/Thermal/Nuclear/Other
(Specify).
2. Name of the Project : Dhamra Port Expansion Project.
3. Clearance letter(s)/OM No. & Date : PD/26017/8/98-PDZ (CRZ)
Dated 04.01.2000
4. Locations:
 - a) District(s) : Bhadrak
 - b) State(s) : Odisha
 - c) Latitude/Longitudes : Lat 20° 48' N to 20 ° 52'N,
: Long 86°56' E to 86°59'E,
5. Address of Correspondence:
 - a. Address of concerned project : The Dhamra Port Company Ltd.
Chief Engineer/Manager (with pin : 2nd floor, Fortune Tower
code & telephone/telex/ fax numbers : Chandrasekharpur,
Bhubaneswar-751 023
: 0674-2303829, fax-0674-303828
 - b. Address of Executive Project : Cdr. Anil Kumar Kar,
Engineer/ Manager (with pin code : Vice President (Projects) & Port
& telephone/telex/fax numbers) : Conservator, Village Dosinga, Dhamra
6. Salient Features:
 - a. of the project :Enclosed as Annexure-I-A
 - b. of the environmental management plan :Enclosed as Annexure-I- B

7. Break up of the Project areas:

- a Submergence area (forest & non-forest) : Not Applicable
b. Others. : Port Area- 300.12 Ha
Rail Road Corridor- 906.1 Ha

Total Area allotted and occupied = **1206.22 Ha**

8.

- Break up of Project affected population, with enumeration of those losing houses/dwelling units only, agricultural land and land less labourers/artisans (**Port Area**)
- a) Losing House – 181 families
 - b) Total rehabilitated – 177 families
 - c) Compensation paid – Rs. 8.57 crores
 - ii) Rural Artisans – Not Applicable
 - iii) Land Less Labours- Not Applicable

- a. SC, ST/Adivasis : SC - 6 families, ST/ Adivasi: 0
b. Others : General Category: 175 families

9. Financial Details

: **Year**

**Project cost
(In INR Crores)**

a. Project cost as originally

1998

1197.43

Planned and subsequent revised

2003

1520

Estimates and the years of

as on date

3239

Price reference

Allocation of funds in Crores (Rs.)

| | | |
|-----|-------------------------------------|----------------|
| 1. | Advance to GoO for Land Acquisition | 98.00 |
| 2. | Construction Contract | 1497.00 |
| 3. | Dredging & Reclamation | 726.00 |
| 4. | Navigational Aids | 10.00 |
| 5. | Railway Locos | 2.00 |
| 6. | Miscellaneous Fixed Assets & ERP | 17.00 |
| 7. | Margin Money | 5.00 |
| 8. | Preoperative Expenses | 135.00 |
| 9. | Contingency | 147.00 |
| 10. | Interest During Construction | 298.00 |
| 11. | Phase II of the Project | 304.00 |
| | Total | 3239.00 |

b. Allocation made for environmental management plans, with item-wise and years-wise break up:

| Si. No. | Item | 2008-09 (Crores) | 2009-10 (Crores) | 2010-11 (Crores) | Total |
|----------------|---|-----------------------------|-----------------------------|-----------------------------|--------------|
| 1 | Monitoring of Environment Parameters by IMMT | 0.125 | 0.375 | 0.55 | 1.05 |
| 2 | IUCN | 1.3 | 1.28 | 1.28 | 3.86 |
| 3 | Water Treatment Plant | 18.6 | 18.6 | 9.3 | 46.5 |
| 4 | Shoreline Changes Study by NIO and others | 20.74 | 20.74 | 20.74 | 62.22 |
| 5 | Water Drainage Management | 1.5 | 1.5 | 1.5 | 4.5 |
| 6 | Environment Awareness & Outreach Programmes | | 0.065 | 0.065 | 0.13 |
| 7 | Demarcation of Gahirmatha Marine Sanctuary | | 0.24 | | 0.24 |
| 8 | Providing Trawler to Forest Dept for Patrolling | | 0.07 | 0.07 | 0.14 |

Total = INR 118.64 Cr

c. Benefit cost ratio/internal rate of return and the year of assessment : IRR—19.45%
2009-2010

d. Whether (c) includes the cost of environmental management as shown in (b) above. : YES

e. Actual expenditure incurred on the project so far : INR 3276 Cr.

f. Actual expenditure incurred on the environmental management so far.

| Sl. No. | Item | 2008-09 | 2009-10 | 2010-11 | Total |
|---------|--|--------------|--------------|--------------|--------------|
| 1 | WTP & Drainage Management | 9.46 | 9.46 | 9.46 | 28.39 |
| 2 | IUCN Fees | 0.65 | 1.82 | 1.17 | 3.64 |
| 3 | Plantation | 1.10 | 1.10 | 1.86 | 4.07 |
| 4 | Monitoring of Environment Parameters by IMMT | 0.13 | 0.38 | 0.25 | 0.75 |
| 5 | Establishment & Functioning of Environment Laboratory | | 0.04 | 0.04 | 0.08 |
| 6 | Turtle Awareness outreach programmes | 0.05 | 0.05 | 0.05 | 0.15 |
| 7 | Trawler to Forest Dept for Patrolling (including fuel) | | 0.125 | | 0.125 |
| 8 | Preventive Measures During Dredging | 0.12 | 0.12 | 0.12 | 0.35 |
| 9 | Installation of 140 KLD STP | | 0.175 | 0.175 | 0.35 |
| 10 | Fire Tenders & Fire Fighting System | | 0.0315 | 0.0315 | 0.063 |
| 11 | Demarcation of Gahirmatha Marine Sanctuary | | 0.09 | 0.09 | 0.177 |
| 12 | Statutory Fees deposited to SPCB | | | 0.10 | 0.101 |
| | Additional Studies | | | | 0 |
| 13 | NIO Shoreline Changes Study | | 0.22 | | 0.22 |
| 14 | NIO Study on Dredging Impacts | | 0.21 | | 0.21 |
| 15 | NIO Study on Hydrodynamic & CRZ Demarcation | | | 0.30 | 0.3 |
| 16 | Mangrove Mapping | | 0.02 | | 0.02 |
| | Total | 11.51 | 13.84 | 13.64 | 38.99 |

Total = INR 38.99 Cr

10. Forest land requirement

:

The application submitted has been withdrawn as currently Forest land is excluded from the Port area. The details are enclosed at Annexure-VI

11. The status of clear felling in Non-forest areas (such as sub-mergence area of reservoir, approach roads), If any, with quantitative information

: Permission has been obtained for felling of 267 trees from non-forest land on approach road & Odisha Forest Development Corporation Ltd has executed the felling.

12. Status of construction:
- a. Date of commencement (actual) : Commencement in 2002.
 - b. Date of completion (actual) : Commencement of Operation – 06.05.2011
13. Reasons for the delay if the project is yet to start. : Not Applicable.

Annexure-I-A

The Dhamra Port company Limited, which is a special purpose vehicle sponsored by TATA Steel and Larsen & Toubro Limited is committed to develop an all weather and deep water port in the State of Odisha, on the eastern coast of India at north of mouth of River Dhamra. The Project is developed on BOOST basis under a Concession Agreement awarded by Government of Odisha.

SALIENT FEATURES OF THE PROJECT:

- A deep draught navigational channel of 18 mtrs to enable the capesize vessels of 1, 80,000 DWT for handling bulk cargo.
- Dolphin type jetty into Sea thereby leaving the natural slope & tide undisturbed.
- In the first phase 2 berths have been constructed.
- A complete state-of art fully mechanized and environmentally friendly Cargo handling facility with water sprinkling system for dust suppression and minimum spillage
- A rail cum road corridor from Bhadrak to Dhamra for transportation of cargo from hinterland

Annexure-I-B

ENVIRONMENT MANAGEMENT PLAN

Following are the main areas of the Environment Management Plan

- 1. Land Management**
- 2. Wildlife Management**
- 3. Air Management**
- 4. Water Management**
- 5. Noise Management**
- 6. Light Management**
- 7. Miscellaneous**

1. LAND MANAGEMENT

| ITEM | ACTION | STATUS |
|--|--|---|
| 1. Plantation | <p>1. Create Green Belt (Conditions vii. of Env Clearance).</p> <p>2. Permission from concerned authorities for cutting of trees. (Condition vii of environment clearance.</p> <p>3. Patch of about 200 mangroves located closer to port area be excluded and be fenced and maintained. (judgment of NEAA)</p> | <p>1. Strip Plantations of 1, 60,000 trees has been carried out along the railroad corridor. More than 1, 00,000 trees planted this year in the Port bulb. Nursery established at site for plantation of the Green Belt.</p> <p>2. Permission has been obtained for felling of 267 miscellaneous species of trees from non-forest land & Odisha Forest Development Corporation (OFDC) has executed the work.</p> <p>3. The area has been excluded from any Project activity and fenced for conservation of the Mangroves.</p> |
| 2. Land development & changes in Land Use patterns | <p>1. Changes in the Land use pattern after reclamation should not interfere with the natural drainage. (condition iv. of environment clearance)</p> | <p>1. Adequate measures taken to retain natural drainage. Hume pipes, culverts and bridges provided all along rail embankment in consultation with Dept of Water Resources & The Directorate of Water Management (<i>formerly WTCER</i>) to ensure that the rail embankment does not obstruct natural drainage.</p> <p>2. Berths are on dolphin type jetty on the sea thereby allowing natural flow of the tides & creeks.</p> |

2. WILDLIFE MANAGEMENT

| ITEM | ACTION | STATUS |
|--|--|--|
| 1. Dredging impact on wildlife. | <p>1. Monitoring of Water quality by authorized institution to ensure that it doesn't affect marine productivity (condition iii. of environment clearance)</p> <p>2. Fitting of Deflectors in the dredgers to prevent harm to marine species (recommendation of IUCN)</p> | <p>1. Regional Research Laboratory of CSIR (now rechristened as IMMT) has been assigned the monitoring. Additionally NIO, Goa had been engaged to study the impact of dredging operations.</p> <p>2. Deflectors have been fitted in all Trailer Hopper Suction Dredgers as per design and under guidance of IUCN scientists and engineers.</p> |
| 2. Lighting impact on wildlife | <p>1. All lights should be dark sky friendly and should not create glare (recommendation of IUCN)</p> | <p>1. DPCL's light management protocol has been developed and implemented under the guidance of IUCN</p> |
| 3. Awareness programmes | <p>1. Undertaking of awareness campaigns amongst fishermen and villagers to minimize harm to Olive ridley turtles. (recommendations of IUCN)</p> | <p>1. Awareness programmes including street plays and interactions with fishing community have been undertaken by IUCN and DPCL. Further 9000 school children of fishing communities have been covered by outreach programmes. On 14-15th November 2010, IUCN-DPCL together with the collaboration with Forest Department, Odisha organized two days workshop on "Workshop on Fisherman Awareness and Use of Turtle Excluder Device" at Talchua, Bhitarkanika, Odisha that covered the various aspects of fisherman awareness such as interaction with fisherman, sustainable fishing, theoretical and practical aspects of TED, TED demonstration & trials.</p> |

3. WATER MANAGEMENT

| ITEM | ACTION | STATUS |
|------------------------|---|--|
| 1. Ground Water | 1. Ground Water should not be drawn from CRZ area for industrial use. (condition i. of environment clearance) | 1. No drawl of ground water from CRZ area is either planned or undertaken. Water is drawn from the river Mantai (10 km away) and stored in an open reservoir outside the CRZ area of capacity 6.7 lakh cum, before treatment at WTP and supply. |
| 2. Sea Water | 1. Monitoring of Water quality by authorized institution to ensure that dredging doesn't affect marine productivity (condition iii. Of environment clearance & 11 of OPCB consent) | 1. Regional Research Laboratory of GOI (now renamed as IMMT, www.immt.res.in) has been monitoring the water quality. Their reports are furnished with the half yearly reports submitted to the ER office of the MoEF. |
| 3. Effluent | 1. Effluent to conform to specified standards. (Condition 5 & 6. of OPCB consent and condition x. of environment clearance). 2. Sewage to be treated according to standards (condition 4. of OPCB consent) | 1. Being a port no industrial effluent will be generated as there is no processing of raw material is involved. Run off from the stack yard is being collected & treated in the settling ponds for precipitation of the suspended solid before using the supernatant water for horticultural use and dust suppression in the port area. 2. A 140 KLD capacity STP is installed and operational. The treated water from STP is being used for horticultural purpose. |
| 4. Ballast | 1. Ballast should be scientifically treated (condition 19 of OPCB consent and viii. Of environment clearance) | 1. Ballast is being strictly monitored as per the statutory regulation. |

4. AIR MANAGEMENT

| ITEM | ACTION | STATUS |
|--------------------------------|---|--|
| 1.Dust Suppression | <p>1. Adequate dust suppression systems in the material handling to minimize emission. (Condition 8. of OPCB consent)</p> <p>2. Captive Stone crushing to be undertaken with adequate dust control measures. (Condition 14 of OPCB consent)</p> <p>3. Ambient air quality inside port premises to confirm to standards prescribed under EP rules 1986. Port to install three air monitoring stations.</p> | <p>1. The material handling is fully mechanized and through covered conveyer belts to reduce dusts.</p> <p>2. Water sprinklers installed and commissioned at BMH area, transfer points of conveyor belt, loader and unloader on the jetty to reduce fugitive dust emission. Green belt in & around port bulb also acts as sink of pollutant.</p> <p>2. Captive stone crushing has been undertaken with Consent to Establish and Consent to Operate from OSPCB. The contractor has been instructed to abide by the environmental rules and regulations. Crushing has been carried out with adequate dust control measures.</p> <p>3. 6 ambient air quality locations are fixed in and around the port site. IMMT Bhubaneswar has been outsourced to do the monthly environmental monitoring. Ambient air quality confirms the prescribed standards.</p> |
| 2.Green Belt plantation | <p>1. Adequate plantation around the port area (condition vii. of environment clearance)</p> | <p>1. More than 1 Lakh plants have been planted inside the port area surrounding the BMH bulb. The plantation activity is continuing in the port area.</p> |

4. LIGHT MANAGEMENT

| ITEM | ACTION | STATUS |
|---|---|---|
| 1.Environment friendly lighting system | 1. Glare created by light can disturb / disorient hatchlings of olive ridley turtles. Lights may be so designed that they do not create glare through spillage by following best practices adopted globally (recommendations of IUCN) | 1. A lighting protocol developed by IUCN has been adopted & regularly monitored to eliminate glare to sky from the port area. |

5. NOISE MANAGEMENT

| ITEM | ACTION | STATUS |
|---------------------------------|---|---|
| 1.Noise Control Measures | 1. Adequate noise control measures to keep noise within prescribed standards.(Condition ix. of environment clearance) | 1. The predominant noise levels will be confined to the work zones in the port. The noise levels are being monitored at all the sources and ambient noise levels are not exceeding the prescribed limit. Community noise levels are not likely to be affected because of the Green Belt and attenuation due to physical barriers. |

6. MISCELLANEOUS

| ITEM | ACTION | STATUS |
|--------------------------------|---|--|
| 1.Approval of design | 1. Design drawings to be approved by concerned Government authorities. (Condition i.e. of environment clearance) | 1. Approvals obtained from the Government of Odisha. |
| 2.Facilities for labour | 1. Infrastructural facilities to be provided to labour during construction to avoid damage to environment (condition ii of environment clearance) | 1. Required infrastructure facilities have been provided for labourers at the project site. |
| 3.Crisis management | <p>1. Fire fighting system to be provided (condition v of environment clearance)</p> <p>2. Staff be trained in crisis management as per guidelines of DG,FASLI and Provisions of Doc Safety Act (condition vi of environment clearance)</p> <p>3. Leakage detection devices with early warning system at strategic locations (condition xii of environment clearance)</p> <p>4. Standby DG set to be provided (condition xiii of environment clearance)</p> | <p>1. Fire fighting system has been installed with two fire tenders.</p> <p>2. Necessary training has been imparted to the staff. (DMP, HSE MP, Oil spill plan previously submitted).</p> <p>3. Not necessary at this stage as liquid cargo is not being planned for the first phase. It shall be installed whenever and wherever necessary.</p> <p>4. 7 DG Sets covered with acoustic enclosure have been installed at site for emergency backups & uninterrupted power supply at the work site which includes the water supply system and fire fighting system</p> |
| 4.Environment Cell | 1. Environment cell to be set up and made operational | 1. Environment Cell has been constituted consisting of an EHS Manager, Asst. Manager, Junior manager, |

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| <p>5.Reporting, Monitoring & Funding</p> | <p>with laboratory facilities through recognized scientific institution (condition xi of environment clearance)</p> <p>1. Half Yearly report to be sent to Eastern Regional Office of MOEF who should be given full cooperation and information. (conditions xiv and xv of environment clearance)</p> <p>2. A Monitoring Committee be constituted during construction and operation in which a representative of Beach Protection Council be included. (condition of NEAA in their judgement)</p> <p>3. Adequate funding be provided.</p> | <p>5 other Chemists & Operators. DPCL is having a Full fledged Laboratory Facility with all required instruments for regular environmental monitoring. Further details are furnished in Annexure – IV.</p> <p>1. Half yearly reports are submitted to the Eastern Regional office of MoEF on regular basis.</p> <p>2. Monitoring Committee with representation of Beach Protection Council has been constituted by the Government of Odisha and is Regularly monitoring the project.</p> <p>3. Adequate funding has been provided.</p> |
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Annexure-II

Brief Status of Construction:

The work which had commenced in 2000 has been resumed and the following is construction / working schedule.

| S. No. | Work | Expected month & year of completion |
|---------------|------------------------|--|
| 1. | Berth | Completed |
| 2. | Bulk Material Handling | Completed |
| 3. | Railway Line | Completed |
| 4. | Water Supply System | Completed |

Annexure-III
MINISTRY OF ENVIRONMENT & FORESTS
EASTERN REGIONAL OFFICE
194, KHARVELANAGAR, BHUBANESWAR – 751 001

PARTICULARS ON GREEN BELT/PLANTATION UNDER FOREST
(CONSERVATION) ACT 1980

1. a) Name of the Organization: Dhamra Port Company Limited.
- b) Env't. /Forest clearance Order Nos.: PD/26017/8/98-PDZ (CRZ)
Dated 04.01.2000
2. Location: Block/sub. Divn./Dist/ Dhamra/ Bhadrak/ Odisha
State:
3. Address for Communication: The Dhamra Port Company Ltd.
2nd floor, Fortune Tower,
Chandrasekharapur, Bhubaneswar 751023.
0674-2303829, fax-0674-2303828
4. Existing Vegetation in the area/
Region:
 - a) Species (tree/shrubs/grasses/
Climbers):
 - 1) *Amaranthus spinosus*
 - 2) *Croton bonplandianus*
 - 3) *Cynodon dactylon*
 - 4) *Cyperus rotundus*
 - 5) *Acanthus ilicifolius*
 - 6) *Caesalpina crista*
 - 7) *Suaeda maritima*
 - b) Major prevalent species of
each type (grasses)
 - 1) *Cynodon dactylon*
 - 2) *Suaeda maritima*
5. Land coverage by the Project:

| | Submitted for Env. Clearance | First phase of development |
|--|---------------------------------|-------------------------------|
| a) Total area under the project: | 4300 acres | 3212 acres |
| b) Area covered for basic infra- structure (roads/railway/ building/factory etc.) | | 2970 acres |

6. Details about natural vegetation:

a) Name and number of tree/
Species felled. : *With prior permission from regulatory authority
267 trees have been felt down from non-forest land
on approach load & OFDC has executed the
felling.*

b) Name and number of plant
Species still available
in the area

: 1) *Acanthus ilicifolius*
2) *Croton bonplandianus*
3) *Cynodon dactylon*
4) *Suaeda maritima*

Not enumerated
since mostly herbs,
and grasses

c) By protecting the area will
indigenous stock come up ?

: *Affirmative (indigenous sp are coming up
naturally in areas protected)*

d) Extent of green belt developed

: *In Progress, plantation is continuing and
Nursery developed at the port site.*

7. Plantation required to be carried \out as per

a) Conditions of Environmental
Clearance in hs./nos : *Green belt of 50 mts width @2000 – 2500
per Hectare*

b) Conditions of Forest (Conservation

) Act. Clearance in ha./nos. : *Not Applicable at present*

c) Voluntarily in ha/nos.

: *All the details are enclosed at Annexure III A*

8. Details about plantation :

a) Total area available for
Plantation in each category:

i) Green Belt ii) Dumps iii) Back filled areas iv) Road sides V) Block plantation

Green Belt (port site) -87 Acres (approx),

Dumps and Back filled area not available

Road/Railway Corridor -306 Acres (approx),

Block plantation (Township) -5 Acres (approx)

b) Plantation details (Category wise & methodology used)

1) Railway Corridor plantation

| Year of Plantation | Species planted | spacing | Height Attained | Total Area covered | Area Still available |
|-----------------------|-----------------|---------|--------------------|--------------------------|----------------------------|
|-----------------------|-----------------|---------|--------------------|--------------------------|----------------------------|

Detailed are enclosed at Annexure – III A

| c) Survival % of plantation | 1 st year | 2 nd year | 3 rd year | 4 th year | 5 th year |
|-----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|-----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|

-Total plantation (No.) - 2, 60,000 trees

- Survival % - 100% - Strip plantations of 1, 60,000 plants have been undertaken along the rail road corridor. This is in addition to 1, 00,000 plants are planted in Port site and further plantation is also in progress in the current plantation season.

09. Financial details (year-wise)

Plantation wise and item wise : *Detailed are enclosed at Annexure – III A*

| Sl. Year No. | Funds allocated | Expenditure made | Average cost of each surviving Plant in Rs. |
|-----------------|-----------------|------------------|---|
|-----------------|-----------------|------------------|---|

Detailed are enclosed at Annexure-I & Annexure – III A

10. Inspection of plantation by field experts and their comments and follow up action. :

Suggestions by Director (S), MoEF (Eastern Regional Office) during site visit of 17th – 18th Dec '09 are incorporated.

11. Remarks / any other information : Not Applicable

Signature of Office Incharge

Annexure – III A

Plantation:

a) Green Belt along Railway Corridor:

Strip plantation on both the edges of the railway corridor has been taken up and 1, 60,000 plants have been planted along the north and the south edges of the corridor.

i) Specifications:

The plantation has been carried out in the northern edge (60 km x 1 m) and southern edge (60 km x 3.5m) of the corridor. Both quick growing and slow growing species has been planted

Species planted in 2008 & 2009 are:

| <i>Quick Growing</i> | <i>Slow Growing</i> |
|--------------------------------|-------------------------------|
| <i>Pithecellobium dulce</i> | <i>Ficus religiosa</i> |
| <i>Terminalia catappa</i> | <i>Terminalia arjuna</i> |
| <i>Acacia auriculiformis</i> | <i>Albizzia lebbek</i> |
| <i>Acacia mangium</i> | <i>Thespesia sp.</i> |
| <i>Delonix regia</i> | <i>Syzgium cumini</i> |
| <i>Peltoforum ferrugenum</i> | <i>Azadirachta indica</i> |
| <i>Bambusa sp.</i> | <i>Dalbergia sissoo</i> |
| <i>Hedge Plantation</i> | <i>Calophyllum inophyllum</i> |
| <i>Bamboosa sp.</i> | |
| <i>Lawsonia inermis</i> | |

b) Greenbelt at port site, plantation of suitable species has been taken up in and around the port bulb and admin/Residential area with effect from 2010 and is continuing. So far 1, 00,000 plants suitable for the site have been planted.

Financial Details- Amount Allocated for Plantation along the rail –road corridor

| S. No. | Description | Amount (Rs. in Crores) |
|---------------|---|-------------------------------|
| 1 | Strip Plantation along the rail road corridor | 4.17 |
| 2 | Green Belt at the port site | 2.29 |
| | Total | 6.46 |

Total money spent till date = INR 3.68 crores.

Annexure-IV
Constitution of Environmental Monitoring Cell

The Dhamra Port Company Limited

(A joint venture of L & T and Tata Steel)
Second Floor, Fortune Towers, Chandrasekharapur, Bhubaneswar - 751023.
Tel : 0674 - 2303829, Fax : 0674-2303828, E-mail : ceo@dhamraport.com
Website : www.dhamraport.com



Santosh K. Mohapatra, IAS (Retd)
CEO

Date : November 3, 2011
Ref : DPCL / Env – 03/ 02 / 11

Dr. V.P. Upadhyay
Scientist 'F'
Eastern Regional Office
Ministry of Environment & Forests

Dear Sir,

Sub: Environment Monitoring Cell of Dhamra Port
Ref: Your Letter No. 106-7(B) – EPE dated 30th September 2011

With kind reference to the above mentioned letter, we would like to state that we have established an Environment Monitoring Cell with the following personnel manning the cell.

1. **Shitikantha Behera**, Manager (Environment, Health & Safety), M.Sc., M.Phil Environmental Science, LLB, PG Diploma in Industrial Safety. 13 years of work experience in environment management (including about 9 years in OSPCB)
2. **Amlan Dutta**, Asst. Manager (Environment, Health & Safety), M.S. Ecology, 12 years of work experience in ecology and environment management.
3. **Jagabandhu Behera**, Jr. Manager (Environment, Health & Safety), B.Tech Electrical, Post Diploma in Industrial Safety with 8 years of work.
4. **Susanta Kumar Sahoo** (Chemist), Ion Exchange, B. Sc (Physics, Chemistry & Mathematics)
5. **B. Ganesh** (Service Engineer – STP), Chempure Technologies Pvt. Ltd. ITI Electrician,
6. **Raghunath Jena** (Operator – STP), Chempure Technologies Pvt. Ltd. Sr. School Leaving Certificate (SSLC)
7. **Panchanan Sahoo** (Operator – STP), Chempure Technologies Pvt. Ltd. SSLC
8. **Purno Maity**, Driver of Monitoring Vehicle.

The List of equipments in the Environment Monitoring Cell is attached overleaf for your kind reference.

Yours Sincerely,

(Santosh K. Mohapatra)

List of Instruments at Environmental Monitoring Cell

| Sl. No. | NAME OF INSTRUMENTS | MAKE | CAPACITY | QUANTITY |
|----------------|---------------------------------|-----------------------|-----------------|-----------------|
| 1 | DIGITAL PH METER 335 | SYSTRONICS | ***** | 1 |
| 2 | PHYSICAL BALANCE | SUNSHINE | 0-100 GM | 1 |
| 3 | DIGITAL NEPHELO TURBIDITY METER | SYSTRONICS | ***** | 1 |
| 4 | DIGITAL PH METER MODEL LT-11 | LABOTRONICS | ***** | 1 |
| 5 | COMPACTOR 2000+ | LOVIBOND | ***** | 1 |
| 6 | MAGNETIC STIRRER | ELICO | ***** | 1 |
| 7 | WEIGHING M/C | SANA | 100G-100KG | 1 |
| 8 | INCUBATOR | SYNCHRONY | ***** | 1 |
| 9 | OVEN | HASTHAS | ***** | 1 |
| 10 | WATER ANALYSIS MULTIMETER KIT | MULTI 340i | ***** | 1 |
| 11 | SPECTROPHOTOMETER | VISISCAN167 | ***** | 1 |
| 12 | DISSOLVED OXYGEN METER | ELICO | ***** | 1 |
| 13 | DIGITAL BALANCE | SHIMADZU | 0-220 GM | 1 |
| 14 | DIGITAL PH METER | DIGISUN ELOCTONICS | ***** | 1 |
| 15 | NOISE SAMPLER | CENTER | ***** | 1 |
| 16 | RESPIRABLE DUST SAMPLER | ENVIROTECH | ***** | 1 |

Annexure V

| Drill Report of DPCL | | | | | | |
|---|-------------|---------------|------------------|----------------|-----------------|-------------------|
| Month | July | August | September | October | November | Cumulative |
| Essentials | | | | | | |
| No. of tool box meeting conducted | 26 | 34 | 29 | 42 | 38 | 169 |
| No. of Fire Drill conducted | 4 | 3 | 2 | 6 | 5 | 20 |
| No. of Mock Drill conducted | 3 | 2 | 2 | 0 | 1 | 8 |
| No. of HSE training program conducted for workmen and staff | 4 | 1 | 3 | 0 | 1 | 9 |
| No. of HSE CSR program conducted at site/near by locations | 0 | 2 | 0 | 3 | 4 | 9 |
| No. of Labour welfare Activities conducted | 0 | 0 | 2 | 3 | 2 | 7 |
| Total man-hours worked | 118590 | 125887 | 109234 | 106776 | 87341 | 544828 |
| No. of CO ₂ fire extinguishers placed at site | | | | | | 3 |
| No. of Foam type fire extinguishers placed at site | | | | | | 2 (45 litres) |
| No. of Powder type (DCP) fire extinguishers placed at site | | | | | | 50 |

| Safety Performance Report (L & T) | | | | | | | |
|---|----------|---------|---------|---------|---------|---------|------------|
| Month Essentials | July' 11 | Aug' 11 | Sep' 11 | Oct' 11 | Nov' 11 | Dec' 11 | Cumulative |
| No. of tool box meeting conducted | 25 | 24 | 25 | 25 | 25 | 26 | 150 |
| No. of Fire Drill conducted | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| No. of Mock Drill conducted | 1 | 1 | 1 | 1 | 1 | 1 | 6 |
| No. of HSE training program conducted for workmen and staff | 6 | 7 | 5 | 6 | 4 | 5 | 33 |
| No. of HSE CSR program conducted at site/near by locations | | | | | | | 0 |
| No. of Labour welfare Activities conducted | 3 | 2 | 3 | 3 | 3 | 3 | 17 |
| Total man-hours worked | 155192 | 165812 | 185112 | 192720 | 183968 | 163500 | 1046304 |
| No. of CO ₂ fire extinguishers placed at site | | | | | | | 7 |
| No. of Foam type fire extinguishers placed at site | | | | | | | 6 |
| No. of Powder type (DCP) fire extinguishers placed at site | | | | | | | 26 |

Annexure-VI

NOTE ON WITHDRAWAL OF FOREST DIVERSION PROPOSAL

The land allotted by Govt. of Odisha for expansion of Dhamra Port Project doesn't include any Forest Area. While starting the construction of boundary wall around the port bulb in 2009, it was noticed that there are certain small & scattered village Forest Plots exist adjacent to the periphery of the Port Project Area. To have a straight boundary wall it was proposed to acquire these Forest kissam plots measuring 20.169 Ha in adjoining four villages.

Accordingly application for Diversion of the Forest Land was submitted by DPCL to the Chief Conservator of Forest Nodal, Odisha on 8th June 2009. The application was forwarded to Divisional Forest Officer, Bhadrak Wildlife Division by the Chief Conservator of Forest Nodal on 23rd June 2009. But the process of identification of Non-Forest land and Certificates under Forest Right Act was delayed.

Since the port has become operational & it is necessary to complete construction of boundary wall, it was decided to withdraw the application of Diversion of Forest land & construct the boundary wall without including the patches of village Forest Land.

Accordingly DPCL has intimated the concerned Authority on 9th January 2012 regarding withdrawal of the application.

LIST OF ANNEXURES

| Sl. No. | Matter Concerned therewith | Annexure No. |
|----------------|--|---------------------|
| 1 | Monitoring Performa duly filled in | Annexure -I |
| 2 | Salient Features of the Project | Annexure-I A |
| 3 | Environment Management Plan | Annexure-I-B |
| 4 | Brief Status of Construction | Annexure-II |
| 5 | Particulars on Green Belt/Plantation under Forest (Conservation) Act 1980 | Annexure-III |
| 6 | Plantation details (Plant specifications & Financial Details) | Annexure – III A |
| 7 | Constitution of Environmental Monitoring Cell & Instrument List for Environmental Monitoring | Annexure IV |
| 8 | Drill and Safety Performance Report | Annexure-V |
| 9 | Note on withdrawal of Forest Diversion Proposal | Annexure-VI |