

The Dhamra Port Company Limited

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

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Santosh K. Mohapatra, IAS (Retd)

CEO

7th June, 2012

The Chief Conservator of Forests
Ministry of Environment and Forests
Government of India
Eastern Regional Office
A/3, Chandrasekharpur
Bhubaneswar – 751 023

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

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

Dear Sir,

The Half Yearly Compliance Report of Dhamra Port Expansion Project for the period from October, 2011 to March, 2012 is submitted herewith in both hard & soft copy.

Thanking you,

Yours sincerely,

(Santosh K Mohapatra)

COMPLIANCE REPORT

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	October 2011 to March, 2012

Conditions & Compliance of Environment Clearance

Si. No.	Environment Clearance Conditions	Compliances
i)	<p><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></p> <p><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></p>	<p>All drawing and designs have the approval of the Government of Odisha, vide letter No. DPP-4/07.1331/Com Dt. 19.2.2007 and Memo no 1153/Com. Dt. 14.2.2007 of Commerce & Transport Dept.</p> <p>Ground water has not been drawn for constructional activities. DPCL uses water drawn from Matai river & stored in its reservoir both for construction & operational purpose.</p>
ii)	<p><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></p>	<p>The facilities such as water supply, fuel, sanitation etc. for laborers have been provided by the firms engaged for construction & operation of the port.</p>
iii)	<p><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.</i></p> <p><i>Dredging operation as far as possible should be kept to the minimum for avoiding any adverse impact on marine life.</i></p>	<p>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 CSIR-Institute of Mineral & Material Technology, Bhubaneswar has been monitoring the air, water and biological parameters both in marine & terrestrial environment regularly.</p>

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 after execution of project.
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. Regular Mock Drills are conducted as per the Crisis Management Plans. The Drill & Safety Performance Report is monitored by the EHS Department. The following trainings for environmental safeguard measures have been conducted between October 2011 and March 2012.</p> <ul style="list-style-type: none"> • Fire Drill & Fire Fighting Training- 35 • Drivers Awareness Training- 6 • Induction Training- 55 • On the Job Safety Training- 18 • Off the Job/Awareness training- 20 • Tool Box Training- 81
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>	A large nursery of multipurpose species has been established for raising quality planting material for the green belt. Green belt has been developed at the port site & along the 62 km Rail/Road 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, 23,000 plants suitable for the site have been planted. Details regarding plant

		<p>species & cost have been furnished at Annexure-III.</p> <p>Necessary permission for felling of 267 miscellaneous trees has been obtained from the competent authority of the Forest Department & the felling was executed by the Odisha Forest Development Corporation Ltd.</p>
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 measures 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>	Noise levels are well within OSHA limits. Workers are provided with ear plugs and ear muffs whenever exposed to higher noise levels. Noise Control measures have been followed at both on shore and off shore work sites. Regular noise monitoring is conducted by CSIR-Institute of Mineral & Material Technology, Bhubaneswar.
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</i>	Environment Cell has been established consisting of an EHS Sr. Manager, Deputy Manager, Junior manager, Executive and 5 other Chemists & Operators. DPCL is having a full fledged Laboratory Facility with all required instruments for regular environmental monitoring. EHS Deputy manager is regularly co-ordinating & monitoring different environmental mitigative measures. The order

	<i>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 institutionalize their Environmental Monitoring through some recognized Scientific Institution for the project.</i>	<p>constituting the Environmental Monitoring Cell & list of instruments installed is enclosed at Annexure – IV.</p> <p>DPCL has institutionalise the environmental monitoring by engaging a recognised scientific institute namely the CSIR-Institute of Mineral & Material Technology, Bhubaneswar and their report including the analysis of data are submitted to the Eastern Regional Office, MoEF, Bhubaneswar.</p>
xii)	<i>Necessary leakage detection devices with early warning system must be provided at strategic locations.</i>	There is no need to install leakage detection system at this stage as the project does not involve storage of any liquid or gaseous cargo.
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 enclosures 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. Diesel operated pump have been installed at fire water pump house for emergency backups in addition to two electric operated main pump and jokey pump.
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>	<p>Third party inspection is conducted through CSIR-Institute of Mineral and Material Technology, Bhubaneswar.</p> <p>Half Yearly Reports regarding implementation of environmental safeguard measures are regularly submitted on 1st June and 1st December, every year to the Eastern Regional Office of MoEF, Bhubaneswar. These measures are inspected by the Regional Office of the Ministry.</p>
xv)	<i>Full support should be extended to the Eastern Regional Office, Ministry of Environment & Forests, Govt of India,</i>	Full support is always being extended to the Eastern Regional Office, Ministry of Environment & Forests, Bhubaneswar

	<i>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>	during their 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. So far INR 44.01 Cr has been expended for implementing environmental management Plan from Yr 2008-12. Details of item & year wise fund allocation break up are enclosed at Annexure-I.
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.

Conditions & Compliance of National Environment Appellate Authority Judgement of the year 2000

Sl. No.	Conditions of the National Environment Appellate Authority order Dt. 8th May 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>	Sincere effort has been made to protect the patch of mangrove plants on the southern side of the port. But it is difficult to guard against the local villagers as strict measures may cause law and order problems. However, awareness programmes have been taken up to motivate the villagers and fisherman for protecting the mangroves. It is proposed to associate Xavier Institute of Management, Bhubaneswar for conducting awareness programme in the neighboring villages.
2)	Constitution of Environment Monitoring Committee	Environment Monitoring Committee has been 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 : Chandrasekharapur,
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) &
telephone/telex/fax numbers) Conservator of Ports, 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. <u>Financial Details</u>	: Year	Project cost (In INR Crores)
a. Project cost as originally	1998	1197.43
Planned and subsequent revised	2003	1520.00
Estimates and the years of	as on date	3639.00
Price reference		

Allocation of funds in Crores (Rs.)

1.	Advance to GoO for Land Acquisition	98.00
2.	Construction Contract	1652.00
3.	Dredging & Reclamation	826.00
4.	Navigational Aids	10.00
5.	Railway Locos	2.00
6.	Repayment of unsecured bridge loan	0
7.	Purchase of miscellaneous Fixed Assets & ERP	75.00
8.	Margin Money	5.00
9.	Pre & Post Operative Expenses	276.00
10.	Contingency	172.00
11.	Interest Paid	523.00
	Total	3639.00

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

S. No	Item	Up to 2011	During 2011-12	Total
1	Monitoring of Environment Parameters by IMMT	1.05	0.5	1.55
2	IUCN	3.86	0.2218	4.08
3	WTP	46.5	0.68	47.18
4	Shoreline Changes Study by NIO and others	0.63	0	0.63
5	Water Drainage Management	4.5	2.47	6.97
6	Environment Awareness & Outreach Programmes	0.13	0	0.13
7	Demarcation of Gahirmatha Marine Sanctuary	0.24	0	0.24
8	Providing Trawler to Forest Dept for Patrolling	0.14	0.02	0.16
9	Plantation	4.17	0.07	4.24
10	EIA for Phase II (RAMBOLL)	0.42	0.109	0.529
11	EMP (IUCN)	0.04	0.011	0.051
12	ISO 14001 Certification		0.04	0.04
13	Water Sprinkling on Road	0.05	0.024	
14	Safety	0.14	0.27	0.41
	Total	61.87	4.416	66.3

c. Benefit cost ratio/internal rate of return and the year of assessment : IRR—14%
2011-2012

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 3639 Cr.

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

S. No.	Item	Up to 2011	During 2011-2012	Total
1	WTP	28.39	0.678	29.068
2	Drainage Management	1.4	0.607	2.007
3	IUCN Fees	4.14	0	4.14
4	Plantation	2.91	0.53	3.44
5	Monitoring of Environment Parameters by IMMT	0.725	0.30	1.025
6	Establishment & Functioning of Environment Laboratory	0.08	0.075	0.155
7	Turtle Awareness outreach programmes	0.15	0	0.15
8	Trawler to Forest Dept for Patrolling (including fuel)	0.11	0.07	0.18
9	Dredging Monitoring	0.35	0.33	0.68
10	Installation, O & M of 140 KLD STP	0.35	0.092	0.442
11	Fire Tenders & Fire Fighting System	0.063	0.108	0.171
12	Demarcation of Gahirmatha Marine Sanctuary	0.177	0	0.177
13	Statutory Fees deposited to SPCB	0.1	0.0075	0.1075
14	Oil Boom & Skimmer	0	0.62	0.62
15	IUCN Environment Management Plan	0.0168	0.116	0.1328
16	Dust Sprinkling & Dust Suppression	0.12	0.0395	0.1595
17	EIA Study RAMBOLL	0.3105	0.05	0.3605
	<i>Additional Studies</i>			
18	NIO Shoreline Changes Study	0.22	0	0.22
19	NIO Study on Dredging Impacts	0.42	0	0.42
20	NIO Study on Hydrodynamic	0.21	0	0.21
21	HTL,LTL Demarcation	0.11	0.011	0.121
22	Mangrove Mapping	0.02	0	0.02
	Total	40.37	3.63	44.01

Total = INR 44.01 Cr

10. 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.
11. Status of construction:
a. Date of commencement (actual) : Commencement in 2002.
b. Date of completion (actual) : Commencement of Operation – 06.05.2011
12. Reasons for the delay if the project is yet to start. : Not Applicable.

Annexure-I-A

The Dhamra Port Company Limited, 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 cape size vessels of 1, 80,000 DWT for handling bulk cargo.
- Dolphin type jetty into Sea thereby leaving the natural slope & tide undisturbed.
- Two dry bulk berths in the first phase
- 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, fenced and maintained. (judgment of NEAA)</p>	<p>1. Strip Plantation of 1, 60,000 trees has been carried out along the rail/road corridor. More than 1, 23,000 trees have been planted in the Port bulb. Nursery has been established at site for plantation.</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 patch containing mangroves has been excluded from Project activity area 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 have been 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	1. Monitoring of Water quality by authorized institution to ensure that it doesn't affect marine productivity (condition iii. of environment clearance)	1. CSIR-Institute of Mineral & Material Technology (IMMT), Bhubaneswar has been assigned the water quality monitoring. Additionally NIO, Goa had been engaged to study the impact of dredging operations on marine environment.
	2. Fitting of Deflectors in the dredgers to prevent harm to marine species (recommendation of IUCN)	2. Deflectors have been fitted in all Trailer Suction Hopper Dredgers (TSHD) as per design and under guidance of IUCN scientists and engineers.
2. Lighting impact on wildlife	1. All lights should be dark sky friendly and should not create glare (recommendation of IUCN)	1. DPCL's light management protocol has been developed, implemented under the guidance of IUCN and in line with International Dark Sky Association.
3. Awareness programmes	1. Undertaking of awareness campaigns amongst fishermen and villagers to minimize harm to Olive ridley turtles. (recommendations of IUCN)	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. IUCN-DPCL together with the collaboration with Forest Department, Odisha have organized workshop on " Fisherman Awareness and Use of Turtle Excluder Device " that covered the various aspects of fisherman awareness and trial for use of TED.

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 Matai (10 km away) and stored in an open reservoir outside the CRZ area of capacity 6.7 lakh m ³ , 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. Institute of Mineral & Material Technology, Bhubaneswar a CSIR body of GoI has been regularly monitoring the water quality.
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 has been 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. Ballast is treated through authorized vendors of OSPCB.

4. AIR MANAGEMENT

ITEM	ACTION	STATUS
1.Dust Suppression	1. Adequate dust suppression systems in the material handling to minimize emission. (Condition 8. of OPCB consent)	1. The material handling is fully mechanized and through covered conveyer belts to reduce dusts. Water sprinklers have been 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 and around port bulb also acts as sink of fugitive dust.
	2. Captive Stone crushing to be undertaken with adequate dust control measures. (Condition 14 of OPCB consent)	2. Captive stone crushing had been undertaken with Consent to Establish and Consent to Operate from OSPCB. The Port has become operational from 6 th May 2011 and no more stone crusher exists now.
	3. Ambient air quality inside port premises to confirm to standards prescribed under EP rules 1986. Port to install three air monitoring stations.	3. Ambient air quality monitoring is conducted at 5 (Five) different locations in and around the Port. CSIR-Institute of Mineral & Material Technology, Bhubaneswar has been outsourced to do the monthly environmental monitoring. Ambient air quality confirms the prescribed standards of EP rules 1986.
2.Green Belt plantation	1. Adequate plantation around the port area (condition vii. of environment clearance)	1. More than 1, 23,000 plants have been planted inside the port area surrounding the BMH bulb. Plantation is continuing in the Port area.

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. It is in line with International Dark Sky Association.

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. DG sets are covered with acoustic lining to reduce ambient noise level.

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	1. Fire fighting system to be provided (condition v of environment clearance) 2. Staff be trained in crisis management as per guidelines of DG,FASLI and Provisions of Doc Safety Act (condition vi of environment clearance)	1. Fire fighting system has been installed with required fire tenders. 2. Necessary training has been imparted to the staffs. <i>(DMP, HSE MP, Oil spill plan previously submitted).</i>
	3. Leakage detection devices	3. Not necessary at this stage as liquid cargo is not

	with early warning system at strategic locations (condition xii of environment clearance)	being planned for the first phase. It shall be installed whenever and wherever necessary.
	4. Standby DG set to be provided (condition xiii of environment clearance)	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.
4.Environment Cell	1. Environment cell to be set up and made operational with laboratory facilities through recognized scientific institution (condition xi of environment clearance)	1. Environment Cell has been constituted consisting of an EHS Sr. Manager, Dy. Manager, Junior manager, Executive and 5 other Chemists & Operators. DPCL is having a Full fledged Laboratory Facility with all required instruments for regular environmental monitoring.
5.Reporting, Monitoring & Funding	<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 judgment)</p> <p>3. Adequate funding be provided.</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 for monitoring the project.</p> <p>3. Adequate funding has been provided.</p>

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	Completion Status
1.	Berth	Completed
2.	Bulk Material Handling	Completed
3.	Railway Line	Completed
4.	Water Supply System	Completed

MINISTRY OF ENVIRONMENT & FORESTS
EASTERN REGIONAL OFFICE
194, KHARVELA NAGAR, BHUBANESWAR – 751001

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

1. a) Name of the Organization: Dhamra Port Company Limited (DPCL)
- 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,
Chandrasekharpur, 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 bonplandianum*
3) *Cynodon dactylon*
4) *Cyperus rotundus*
5) *Acanthus ilicifolius*
6) *Caesalpinia 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 miscellaneous trees have been felled from non-forest land and OFDC Ltd has executed the felling.*

b) Name and number of plant Species still available in the area : 1) *Acanthus ilicifolius*
2) *Croton bonplandianum*
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 protected areas)*

d) Extent of green belt developed : *Green Belts have been developed over 62 Km long Rail-Road Corridor and also in and around the Port bulb.*

7. Plantation required to be carried out as per

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

b) Conditions of Forest (Conservation) Act. Clearance in ha./nos. : *Not Applicable*

c) Voluntarily in Ha/nos. : *Strip plantation on both sides of the Rail-Road Corridor over 62 Km.*

8. Details about plantation :

a) Total area available for Plantation in each category (in Acre)

i) <u>Green Belt</u>	ii) <u>Dumps</u>	iii) <u>Back filled areas</u>	iv) <u>Road sides</u>	v) <u>Block plantation</u>
87	Not Applicable	Not Applicable	110	5

b) Plantation details (Category wise & methodology used)

i) Green Belt

Year of Plantation	Species planted	spacing	Height Attained	Total Area Covered	Area Still available
2010-2011	<i>Casuarina equisetifolia</i> <i>Acacia mangium</i> <i>Acacia auriculiformis</i> <i>Peltophorum ferrugineum</i> <i>Terminalia arjuna</i> <i>Syzygium cumini</i> <i>Azadirachta indica</i>	2mX2.5m 2mX2m 1mX1m	4m	25Acre	62Acre

iv) Railway Corridor plantation

Year of Plantation	Species planted	spacing	Height Attained	Total Area Covered	Area Still available
2008-2009	<i>Pithecellobium dulce</i> <i>Terminalia catappa</i> <i>Acacia auriculiformis</i> <i>Acacia mangium</i> <i>Delonix regia</i> <i>Peltophorum ferrugineum</i> <i>Bambusa sp.</i> <i>Ficus religiosa</i> <i>Terminalia arjuna</i> <i>Albizia lebbek</i> <i>Thespesia sp.</i> <i>Syzygium cumini</i> <i>Azadirachta indica</i> <i>Dalbergia sissoo</i> <i>Calophyllum inophyllum</i>	1mX1m	7m	88 Acre	22 Acre

v) **Block Plantation**

Year of Plantation	Species planted	spacing	Height Attained	Total Area Covered	Area Still available
2011	<i>Casuarina equisetifolia</i> <i>Acacia mangium</i> <i>Acacia auriculiformis</i> <i>Delonix regia</i> <i>Azadirachta indica</i>	2mX2m	3m	4 Acre	1 Acre

c) Survival % of plantation

<u>1st</u> <u>Year</u>	<u>2nd</u> <u>Year</u>	<u>3rd</u> <u>Year</u>	<u>4th</u> <u>Year</u>	<u>5th</u> <u>Year</u>
100%	100%	95%	85%	80%

09. Financial details (Year-wise)

Plantation wise and item wise :

Sl. No.	Year	Funds allocated (INR Crores)	Expenditure made (INR Crores)	Average cost of each surviving Plant in Rupees
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1	Up to 2011	4.17	2.91	
2	2011-2012	0.07	0.53	122

10.	Inspection of plantation by field experts and their comments and follow up action.	Plantation was inspected by the Director (S), MoEF (Eastern Regional Office) during their annual inspections and have communicated their comments. : The observations of director (S) have been complied with and the action taken reports have been submitted.
11.	Remarks / any other information	: Not Applicable

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, Chandrasekharpur, 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 ELECTONICS	*****	1
15	NOISE SAMPLER	CENTER	*****	1
16	RESPIRABLE DUST SAMPLER	ENVIROTECH	*****	1

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	Annexure-III
6	Constitution of Environmental Monitoring Cell and list of instruments on Environmental Monitoring Cell	Annexure-IV