

Ministry of Environment & Forests
Eastern Regional Office, Bhubaneswar
Monitoring Report No. 24 Dated 12.1.2018

Part - I

DATA – SHEET

F. No.	NO. No.: J-11011/108/2005 –IA II(I) dated 21 st .Jun.'2005	
1.	Project type: River – Valley/Mining/Industry/Thermal / Nuclear / Other (specify)	: Pipeline Expansion Project
2.	Name of the project	: Pipeline Expansion Project from Numaligarh to Siliguri
3.	Clearance letter (s) / OM No. & date.	: No.: J-11011/108/2005 –IA II(I) dated 21 st June 2005
4.	Locations:	
	a. District (s)	: Cooch Behar, Jalpaiguri & Darjeeling
	b. State (s)	: West Bengal
	c. Latitudes / Longitudes	Sankosh : Lat: N 26°27' , Long.: E89° 51' Rangapani Lat N 26°66' , Long.: E 88° 38'
5.	Address of correspondence:	
	a. Address of concerned Project Chief Engineer (with PIN Code) & telephone / telex/fax numbers	: DGM(Pipeline Project) Pipeline Head Quarter Oil India Limited. PHQ PIN : 781 171 Ph. : 0361- 2641145
	b. Address of Executive Project Engineer /Manager (with PIN Code) & telephone / telex/fax numbers	:Chief Engineer (Pipeline Project) Pipeline Head Quarter Oil India Limited. PHQ PIN : 781 171 Ph. : 0361- 2594272 Office Fax : 0361-2642804
6.	Salient features:	
	a. of the project.	Length : 660 km ,including existing 259 km Loop segments Length in West Bengal : 201 km

	b. of the environmental management	<p>Project Cost: 468.92 crores Size : 406 mm (16") Design capacity : 1.721 MMTPA</p> <p>Product : HSD (1367 TMTPA), SKO (219 TMTPA), MS (135 TMTPA) Pumping stations : One at Numaligarh (Assam)</p> <p>Receipt Terminal : At Siliguri (Rangapani – West Bengal) within NRL's Receiving terminal</p> <p>Intermediate Pigging Station : 4 nos. located within existing pump stations at Sekoni (PS4), Noonmati (PS5), Bongaigaon (PS6) in Assam & Madarihat (PS7) in West Bengal .</p> <p>SCADA & APPS for monitoring, leak detection & batch tracking.</p> <p>Cathodic protection for external corrosion and injection of corrosion inhibitor for internal corrosion.</p> <p>Use of pre coated pipe.</p>
7.	Break up of the project area:	
	a. Submergence area (forest & non forest)	<p>No submergence on any area will take place in the state of West Bengal: OIL's existing ROW: 184 km New ROU : 17 km</p> <p>Only the following new ROU acquisition took place in the state of West Bengal : Total acquisition : 17.266 KM At river crossings (11 locations) : 6.214 Km Tea garden Land Near Birpara to Washabari : 9.007 km To avoid Rly tracks : 2.045 Km</p>
	b. Others	
8.	Break up of project affected population, with enumeration of those losing houses / dwelling units only, agricultural land and land less labourers / artisans	None
	a. SC, ST/Adivasis	NIL
	b. Others	NIL
9.	Financial Details:	

	a. Project cost as originally planned and subsequent revised estimates and the years of price reference.	Rs. 468.92 Crore (Combined for Assam and West Bengal)
	b. Allocations made for environmental Management plans, with item-wise and years wise break up.	Rs. 3.0 crore (Combined for Assam and West Bengal)
	c. Benefit cost ratio/internal rate of return and the year of Assessment.	IRR: 19.17% before tax and 16.19% after tax.
	d. Whether (c) includes the cost of Environmental Management as shown in (b) above.	Yes
	e. Actual expenditure incurred on the Project so far.	Rs. 447.44 Crores
	f. Actual expenditure incurred on the Environmental Management plans so far.	Rs. 7, 62, 23,966/- till date which is more than (b)
10.	Forest land requirement:	
	a. The status of approval for a diversion of forest land for non-forestry use.	Total 18.531 Hec. of Land of 4 RF in Bengal, namely Kalimpong (Gen. & Spl.) division, U/ Tandu RF, Diana RF & Baikunthpur RF handed over to OIL. Total 35.633 Hec. of Wildlife forest area land in WB namely Buxa TRF (West), Jaldapara WL Sanctuary & Mahananda WL Div.-I Sanctuary in WB handed over to OIL.
	b. The status of compensatory Afforestation, if any.	Voluntary payment already made of Rs. 4,00,00,000/-(Four crores) for the Plantation under a special Dev. Fund for 3 WL & overall forest in WB. Moreover, against diversion of land a Total of Rs.34612468.00 CA & NPV paid to the Deptt. of Forest.
	c. The status of clear felling.	No tree felling required inside forest area.
	d. Comments on the viability & sustainability of compensatory Afforestation programme in the light of actual field experience so far.	C A scheme was proposed and implemented by Deptt of Forest, West Bengal
11.	The status of clear felling in non-Forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	:Felling of shading trees of Tea garden and uprooting of tea bushes took place in newly acquired ROU near Birpara to Washabari.
12.	Status of construction	
	a. Date of commencement (actual and / Planned)	NSPL commissioned on 27.08.2008.
	b. Date of completion (actual and / Planned)	Line filling was completed on 24.04.2009 and product pumping is continuing as per allotted quota. Till date the Operation is smooth and incident free.

13.	Reasons for the delay if the project is yet to start	: Delay in completion in major river crossing job by Micro tunneling, due to flood, various local and site problems
14.	Date of site visits	
	a. The dates on which the projects was monitored by the regional office on previous occasions, if any.	During October 2005 Pipeline ROW & ROU visit by Mr. S. Kerketta, Joint Director (S) before execution of project.
	b. Date of site visit for this monitoring report.	Mr. Khazan Singh , regional CCF visited the forest sites on 09.11.2006 Mr. R. K. Dey, CCF (Central) MoEF visited forest sites on 09.11.2006 : From 15.01.2008 to 24.01.2008 by Director (S) MoEF, Bhubaneshwar Mr. V.P.Upadhyay. : From 10.04.2008 to 12.04.2008 by Director (S) MoEF, Bhubaneshwar Mr. V.P.Upadhyay. : From 23-04.2010 to 24.04.2010 Director (S) MoEF, Bhubaneshwar Mr. V.P.Upadhyay & Shri B. K. Mohanty, Advisor Society of Geoscientist and Allied Technology visited West Bengal sector & also attended Environmental Awareness Programme organized by OIL. :07.10.2016 to 12.10.2016 by Adviser NE Regional Office, Shillong visited PS6, Bongaigaon & PS7, Madarihat.
15	Details of correspondence with project Authorities for obtaining action Plans, information & status of Compliance to safe guards.	: Pipeline laying within Mahananda WL, U Tandu RF, Baikanthpur, Diana RF, Buxa TRF completed with the guidance and supervision of Deptt. of Forest & Wildlife, West Bengal in consultation with Director (S) MoEF.

Part –II
CHECK LIST OF COMPLIANCE

Clearance OM /Letter No. & date: No.: J-11011/108/2005 –IA II(I) dated 21st.Jun.'2005

Pipeline Expansion Project from Numaligarh to Siliguri (Phase-II) of M/s Oil India Limited

<u>Specific Condition</u>	Condition (state briefly) (1)	Status of compliance (2)
i)	Design, Material of construction , assembly, inspection , testing and safety of Pipeline	Complied
ii)	Safety audit	OISD team carried out the audit of NSPL installations from 19.06.2008 cleared for commissioning. Internal safety audit carried out every year since 2009. ESA OISD audit carried out in Mar'2013.
iii)	River crossing & riverbed, dyke ,embankments restoration	All such crossing job completed and restoration is completed. NOCs obtained from authorities concerned.
iv)	River, rail, Road crossings	Designed as per ASME/ANSI requirement and executed accordingly.
v)	HDD for rivers	All the minor rivers/ Nala crossings are completed with open cut. Major rivers namely Sankosh /Raidak & Tista crossings completed by HDD/MT method.
vi)	Plantation	Implemented by Deptt. of Forest under the Proposed CA Scheme and sponsored by OIL.
vii)	SCADA, OFC communication, Cathodic Protection, Intelligent Pigging etc.	SCADA system is installed for monitoring and control with MCS at PHQ, Narangi. A dynamic statistical based leak detection system is installed.
viii)	OISD Norms for Pearson & CP survey, monitoring	CIPL survey completed.

ix)	Fire water & OISD – 117	Extended from NRL mains of Marketing (Receipt) Terminal.
x)	Green Belt	Terminal is inside NRL Receipt Terminal. NRL Marketing Terminal has Green Belt Cover.
xi)	Permission from CWLW, Govt. of West Bengal for BTR, Jaldapara & Mahananda WL	Permission received after clearance from Standing Committee, CEC & Supreme Court Bench.
	General Condition	
i)	Adherence to W B Pollution Control Board stipulation	Complied.
ii)	No change of Route & OISD standard to be adhered to.	Complied
iii)	Care for Protection of Public life, wildlife, forest power line, buildings or placed habitation	Adequate care taken and till date nothing reportable has come up.
iv)	CIF, CCE & Fire approval	Complied.
v)	Detailed Risk analysis	RRA study carried out by M/s EIL. EMP is prepared by M/s EIL.
vi)	Infrastructure facilities to construction workers	Provided.
vii)	EMP & RRA implementation	Complied & being complied.
viii)	Social Upliftment	Donated Rs. 2 lakh to Adarsh Vidyamandir High School, Banarhat, Dist : Jalpaiguri, on 15-02-2011 to purchase lab equipment.
ix)	Environment Management Cell	Exists.
x)	Environment Fund of Rs. 300 lakhs	Reserved and being utilized for environment related expenses for the entire project including West Bengal Sector.
xi)	Six Monthly Compliance Report	Being complied.
xii)	A separate Environmental Cell with laboratory facility	The existing Cell uses the Laboratory facility of North Bengal university, WPCB, NRL Terminal Chemical Lab. & Public Analyst, Govt. of Assam and IOCL, Ghy, RRL Jorhat and Chemical Deptt. , OIL Duliajan.
xiii)	Inform Public of MoEF clearance	Press advertisement done
iv)	Final closure date	NSPL commissioned on 27.08.2008. Entire Pipeline line is filling completed on 24.04.2009 and product pumping is continuing as per allotted quota. Till date the Operation is smooth and incident free.

Part –III

Descriptive Report on status of compliance to conditions of environment clearance and environment management.

1.	Clearance letter/OM No. & Date: J-11011/219/2004 –IA II(I) dated 9 th. Feb.'2005 from MOEF
A.	<u>Compliance to condition of environment clearance.</u>
Condition (i):	The design, material of construction, assembly, Inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/ petroleum products shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.
Status of Compliance:	Complied
Condition (ii):	Annual safety audit should be carried out for the initial three years by an independent agency and report submitted to this Ministry for ensuring the strict compliance of safety regulations on operation and maintenance.
Status of Compliance:	Internal safety audit carried out every year. Exploring independent agencies for carrying out safety audits.
Condition (iii):	The construction of pipeline particularly at the river and stream crossing should be done during dry seasons to avoid disturbance of breeding seasons and soil erosion. The riverbed, embankments and / dykes shall be restored adequately after installation of crossings.
Status of Compliance:	Complied and completed satisfactorily.
Condition (iv):	Pipeline wall thickness and minimum depth of burial at river crossings and casings at rails, major road crossings should be in conformity with ANSI / ASME requirements.
Status of Compliance:	Jobs completed satisfactorily conforming to ANSI / ASME requirement.
Condition (v):	The company should follow horizontal drilling technique for laying of pipeline while passing through major rivers.
Status of Compliance:	Complied. All Trenchless method followed.
Condition (vi):	The project authorities should plant a minimum of 10 trees for every tree cut along the pipeline route in construction with the local DFO (s).
Status of Compliance:	Carried out by deptt. of Forest, WB per CA scheme.. No requirement of tree felling in any forest area.
Condition (vii):	The project authorities should install SCADA system with dedicated optical fibre based telecommunication link for safe operation of pipeline and Leak Detection System. Additional sectionalizing valves in the residential areas and sensitive installations should be provided to prevent the amount of gas going to the atmosphere in the event of pipeline failure. Intelligent pigging facility should be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system should be provided to prevent external corrosion.

Status of Compliance:	Complied. SCADA system is installed for monitoring and control with MCS at PHQ, Narangi. A dynamic statistical based leak detection system is installed. Sectionalising valves are provided at strategic locations. Impressed current CP system is provided to coated pipes to prevent external corrosion. Corrosion Inhibitor is used to prevent internal corrosion and Corrosion Coupons are being installed at 6 locations to monitor internal corrosion.
Condition (viii):	The project authorities shall patrol and inspect the pipeline regularly for detection of faults as per OISD guidelines and continuous monitoring of pipeline operation by adopting non-destructive method(s) of testing as envisaged in the EMP. Pearson survey and continuous potential survey should be carried out at regular intervals to ensure the adequacy of cathodic protection system.
Status of Compliance:	Regular Ground patrolling of ROW twice a week is being carried out throughout the Pipeline.
Condition (ix):	The fire water facilities at the terminals must be designed as per OISD – 117 guidelines. However, for fighting prolonged fires, the company should firm up a plan for assured water supply from nearby ground water source / surface water source. This must be complied before commissioning the project.
Status of Compliance:	The terminal is located within the premises of NRL complex and fire fighting facilities are extended from SMT,NRL's mains. Fire detection and suppression system is maintained and monitored.
Condition (x):	Green belt should be provided to mitigate the effects of fugitive emission all around the intermediate pumping stations. A minimum of 25% of the total land acquired should be developed as green belt in consultation with the local DFO.
Status of Compliance:	No intermediate pumping station in the Pipeline.
B.	<u>General Conditions:</u>
Condition (i):	The project authority must adhere to the stipulations made by West Bengal State Pollution Control Board and State Government.
Status of Compliance:	Adhered to.
Condition (ii):	There will be no change in the pipeline route, design capacity without the prior approval of the Ministry. While laying the pipeline, OISD standards with regard to distance etc., from private buildings, industrial buildings or placed or habitation etc should be followed.
Status of Compliance:	Complied
Condition (iii):	During the project construction phase, adequate care must be exercised for protection to public life, wildlife, forest power line, buildings etc in the vicinity of pipeline and in consonance with local government's regulations.
Status of Compliance:	Adhered to. NOCs were obtained from Forest authorities, Irrigation dept., BDO, PWD, Gram Panchyats etc.
Condition (iv):	The project authority must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous chemicals Rules, 1989 as amended in 2000. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fires Safety Inspectorate etc. must be obtained.
Status of Compliance:	Complied.
Condition (v):	Detail risk analysis of the pipeline and associated facilities must be done once the engineering design and layout is frozen. Based on this, on site and off-site emergency preparedness plan must be prepared. Approval from the nodal agency must be obtained before commissioning the project.
Status of Compliance:	RRA prepared by M/s EIL. Onsite / Offsite Emergency Plan (Disaster Management Plan) is available.

Condition (vi):	Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for construction workers during the construction phase so as to avoid felling of trees and pollution of water and the surroundings.
Status of Compliance:	Provided during entire construction jobs.
Condition (vii):	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the Environmental Management Plan and risk analysis report.
Status of Compliance:	Complied.
Condition (viii):	The project proponent should have a scheme for social uplift in the surrounding villages with reference to contribution in road construction, education of health centers, sanitation facilities, drinking water supply, community awareness and employment to local people whenever and wherever possible both for technical and non-technical jobs.
Status of Compliance:	Will be covered by the existing CSR scheme of the Company.
Condition (ix):	A separate Environmental Management Cell equipped with full fledged laboratory facilities must be set up to carry out the Environmental Management and monitoring function.
Status of Compliance:	Pipeline department has a Safety & Environment cell headed by a Chief Engineer under over all control of Company's Safety & Environment department.
Condition (x):	The project authorities shall earmark an amount of Rs. 300 lakhs (as per question no. xxx of questionnaires) to implement the conditions stipulated by ministry of Environment & Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purpose.
Status of Compliance:	The actual expense on account of Environmental and Forest was much higher.
Condition (xi):	The implementation of the project vis-a- vis environmental action plans will be monitored by Ministry's Regional office at Shillong/ Bhubaneswar / State Pollution Control Board / Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.
Status of Compliance:	Being complied.
Condition (xii):	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive.
Status of Compliance:	The existing Cell uses the Laboratory facility of North Bengal University, WPCB & Public Analyst, Govt. of W Bengal and Chemical Deptt., OIL Duliajan.
Condition (xiii):	The Project Proponent should inform the public that the project has been accorded environmental clearance by Ministry and copies of the clearance letter are available with the State Pollution Control Board / Committee and may also be seen at Website of Ministry of Environment and Forests at http://envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and copy of the same should be forwarded to the Regional office at Bhubaneswar.
Status of Compliance:	Press advertisement published on one English News Paper and one Bengali news Paper in the state of West Bengal.
Condition (iv):	The Project Authorities should 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 commencing the land development work.

Status of Compliance	NSPL commissioned on 27.08.2008. Entire Pipeline line is filling completed on 24.04.2009 and product pumping is continuing as per allotted quota. Till date the Operation is smooth and incident free.
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- B. Descriptive report on other aspects of environmental management not specifically covered above :
Not applicable.