

Ministry of Environment & Forests
North Eastern Regional Office
Monitoring Report 8, Dated 30.06.2009

Part - I

DATA – SHEET

F. No.	<u>NO. J-11011/219/2004 –IA II(i) dated 9 th. Feb.’2005</u>	
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-11011/219/2004 –IA II(i) dated 9 th. Feb.’2005
4.	Locations:	
	a. District (s)	:Golaghat, Nagaon, Morigaon, Kamrup, Barpeta, Nalbari, Bongaigaon, Chirang & Kokrajhar
	b. State (s)	: Asom
	c. Latitudes / Longitudes	NRL : Lat : N 26° 35′, Long.: E 93° 47′ Sankosh : Lat: N 26°27′, Long.: E89° 51′
5.	Address of correspondence:	
	a. Address of concerned Project Chief Engineer (with pincode) & telephone / telex/fax numbers	: Chief Engineer (Pipeline Project) Pipeline Head Quarter Oil India Limited. PHQ PIN : 781 171 Ph. : 0361- 2594343
	b. Address of Executive Project Engineer /Manager (with pincode) & telephone / telex/fax numbers	: Head (Pipeline Project) Pipeline Head Quarter Oil India Limited. PHQ PIN : 781 171 Ph. : 0361- 2641145
6.	Salient features:	
	a. of the project.	Length : 660 km ,including existing 259 km Loop segments
	b. of the environmental management	(Assam 197 new construction + 259 KM old Pipeline in Assam. Project Cost: 468.92 crores (Assam + West Bengal) Size : 406 mm (16’) Design capacity : 1.721 MMTPA

		<p>Product : HSD (1367 TMTPA), SKO (219 TMTPA), MS (135 TMTPA)</p> <p>Pumping stations : One at Numaligarh</p> <p>Receipt Terminal : At Siliguri within NRL's Receiving terminal</p> <p>Intermediate Pigging Station :4 nos. located within existing pump stations at Sekoni (PS4), Noonmati (PS5), Bongaigaon (PS6) & Madarihat (PS7) .</p> <p>SCADA & APPS for monitoring, leak detection & batch tracking.</p> <p>Cathodic protection and injection of corrosion inhibitor for internal corrosion.</p> <p>Use of pre coated pipe.</p>
7.	Break up of the project area:	: None
	a. Submergence area (forest & non forest)	No submergence on any area will take place.
	b. Others	<p>Only the following ROU acquisition has taken place :</p> <p>At river crossings (11 locations) : 6.214 Km</p> <p>Tea garden Land : 9.007 km</p> <p>To avoid Rly tracks : 2.045 Km</p>
8.	Break up of project affected population, with enumeration of those losing houses / dwelling units only, agricultural land and land less labourers / artisans	
	a. SC, ST/Adivasis	NIL
	b. Others	NIL
9.	Financial Details:	

	<p>a. Project cost as originally planned and subsequent revised estimates and the years of price reference.</p> <p>b. Allocations made for environmental Management plans, with item-wise and years wise break up.</p> <p>c. Benefit cost ratio/internal rate of return and the year of Assessment.</p> <p>d. Whether © includes the cost of Environmental Management as shown in (b) above.</p> <p>e. Actual expenditure incurred on the Project so far.</p> <p>f. Actual expenditure incurred on the Environmental Management plans so far.</p>	<p>Rs. 468.92 Crore (Combined Assam and West Bengal)</p> <p>Rs. 3.0 crore (Combined Assam and West Bengal)</p> <p>IRR: 19.17% before tax and 16.19% after tax.</p> <p>Yes</p> <p>Rs. 429.06 Crores (approx)</p> <p>Rs. 54, 67,825/- till date in Assam. However, actual total expenses in Assam & WB on Environmental Management plan is expected to exceed (b).</p>
10.	Forest land requirement:	
	<p>a. The status of approval for a diversion of forest land for non-forestry use.</p> <p>b. The status of compensatory Afforestation, if any.</p> <p>c. The status of clear felling.</p>	<p>No forest land diversion is needed as the newly laid pipeline is passing through OIL's old ROW in Panbari, Magurmari, Phukagaon and Guma Forest. There will be no activity inside KNP.</p> <p>1) Payment made for the Plantation Proposal received from DFO, Golaghat. 2) Payment made by OIL for Plantation & afforestation near Jalukbari 3) Cost of one anti poaching camp sponsored by OIL at Panbari</p> <p>No tree felling required inside forest area.</p>

	d. Comments on the viability & sustainability of compensatory Afforestation programme in the light of actual field experience so far.	C A scheme is proposed & implemented by Deptt of Forest, Assam financed from Project Department.
11.	The status of clear feeling 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 Borchapori & Numaligarh under the supervision of Forest deptt. of Assam.
12.	Status of construction	
	a. Date of commencement (actual and / Planed) b. Date of completion (actual and / Planned)	: NSPL commissioned on 27.08.2008 Up To SVI. Line filling upto Rangapani Terminal (In WB) with Product HSD completed on 24.04.2009.
13.	Reasons for the delay if the project is yet to start	: Pipe Laying job has been completed in June'07. However due to technical problems in major river crossing by HDD / Micro-tunneling and dewaxing of 212 Km loopline, project completion was delayed.
14.	Date of site visits	
	a. The dates on which the projects was monitored by the regional office on previous occasions, if any. b. Date of site visit for this monitoring report.	: From 06.03.2006 to 08.03.2006 by joint Director (S) MoEF, Shillong Mr. S. C. Katiyar. : From 15.06.2006 to 16.06.2006 by Joint Director (S) MoEF Shillong Mr. H. S. Malviya. : 21.05.2007 to 23.05.2007 a team of Officials of CPCB led by Mr. A. Chattapadhy & Mr. S. Dutta visited Project sites. : 25.02.2008 to 27.02.2008 by Joint Director (S) MoEF, Shillong Dr. S.C.Katiyar. : From 10.04.2008 to 12.04.2008 by Director (S) MoEF, Bhubaneshwar

		Mr. V.P.Upadhyay. : On 03.03.2009 by Joint Director (S) MoEF, Shillong Dr. S.C.Katiyar.
15	Details of correspondence with project Authorities for obtaining action Plans, information & status of Compliance to safe guards.	: Was in constant touch with Forest officials for their guidance during 75 kms NRL-GHY section. For the Sector from Barpeta Road to Sankosh laying activity inside the reserve forest area is completed under constant Coordination and guidance of Deptt. of Forest.

Part –II

CHECK LIST OF COMPLIANCE

Clearance OM /Letter No. & date: .: J-11011/219/2004 –IA II(i) dated 9 th. Feb.'2005

Pipeline Expansion Project from Numaligarh to Siliguri (Phase-I) 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 safety audit of NSPL installations in the month of June'2008 and clears for
iii)	River crossing & riverbed, dyke ,embankments restoration	All such crossing job completed and restoration done. NOCs. obtained from authorities concerned.
iv)	River crossings	Designed as per ASME / ANSI requirement and executed accordingly.
v)	HDD for rivers	All the major river crossings like Digaru,Puthimari,Pallah,Dumarkijan Bholukaduba, Manas, Dulani Gaurang completed by HDD method. Moreover, other major Rivers namely Beki, Aie, Garufella & Hruwaputha has also been

		completed by submerging Trenchless method i.e. Microtunneling.
vi)	Plantation	Sponsored by OIL & same has been implemented by DFO, Golaghat.
vii)	SCADA, OFC communication, Cathodic Protection, Intelligent Pigging etc.	Complied with.
viii)	OISD Norms for Pearson & CP survey, monitoring	CIPL carried out after commissioning of the Pipeline Project.
ix)	Fire water & OISD – 117	Extended from NRL mains at Numaligarh Terminal.
x)	Green Belt	Terminal is inside Numaligarh Refinery Complex having Green Belt Cover.
xi)	No development zone	Guidance taken from Forest personnel.
	General Condition	
i)	APCB stipulation	NRL to Sankosh river: Complied.
ii)	No change of Route & OISD standard to be adhered to.	Complied
iii)	Care for wildlife, forest power line, buildings or placed habitation	Adequate care taken with guidance from concerned deptt.
iv)	CIF, CCE & Fire approval	Complied.
v)	Detailed Risk analysis	RRA study carried out by M/s EIL. EMP is also prepared by M/s EIL.
vi)	Infrastructure facilities to construction workers	Provided.
vii)	EMP & RRA implementation	Complied.
viii)	Social Upliftment	Being an expansion Project will be covered by the existing schemes of OIL.
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	Complied
xii)	A separate Environmental Cell with laboratory facility	The existing Cell uses the Laboratory facility of APCB & 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 Line filling with Product fillwith HSD BSII upto SV1, Kaziranga.

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:	Will be carried out after made operable.	
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. Since completed.	
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:	Complied.
Condition (v):	The company should follow horizontal drilling technique for laying of pipeline while passing through major rivers.
Status of Compliance:	Complied
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 DFO, Golaghat for 75 KM NRL – Guwahati section. No requirement of tree felling in the balance portion in Assam.
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.
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 is being carried out through out 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 near by ground water source / surface water source. This must be complied before commissioning the project.
Status of Compliance:	Both the terminals are located within the premises of NRL complex and fire fighting facilities are extended from NRL’s mains.
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:	Despatch terminal, the only pump station of NSPL project is covered by existing Green Belt around refinery complex.
Condition (xi):	The company shall take precautionary measures for uninterrupted movement of the wild animal while laying of the pipeline along the existing pipeline in the No Development zone. The company shall prepare action plan for implementation in

	this regard in consultation with CCF (Wildlife), Govt. of Assam.
Status of Compliance:	During laying of the Pipeline forest personnel have guided and helped the construction team.
B.	<u>General Conditions:</u>
Condition (i):	The project authority must adhere to the stipulations made by Assam 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.
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. Emergency plan made available for product pipeline also.
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 and being continued for the left over 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	Complied.

Compliance:	
Condition (viii):	The project proponent should have a scheme for social upliftment 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 schemes 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:	Exists
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:	Reserved for environment related expenses.
Condition (xi):	The implementation of the project vis-a- vis environmental action plans will be monitored by Ministry's Regional office at Shillong / State Pollution Control Board / Central Pollution Control Board. A six monthly compliance status report should be submitted to monitoring agencies.
Status of Compliance:	Complied / shall be 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 APCB & Public Analyst, Govt. of Assam and IOCL, Ghy, RRL Jorhat 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 Shillong.
Status of Compliance:	Press advertisement published on 26.02.2005 in The Amar Asom (Assamese) and The Assam Tribune (English).
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	NSPL commissioned on 27.08.2008. Pipeline filling with Product completed on

Compliance:	24.04.2009.
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- B. Descriptive report on other aspects of environmental management not specifically covered above:Not applicable.