

**Hazira Mora Gas Pipeline, Hazira, District Surat  
Environmental Compliance Report for Natural Gas  
Pipeline**

**Status Period: October 2013- March, 2014**

# HLPL's Environmental Compliances Report for 14 Km Natural Gas Pipeline

## Section I

**Environment Clearance from Ministry of Environment and Forests (J-16011/20/2003-IA-III, dated 24<sup>th</sup> Oct. 2003 subsequent amendment vide letter No. 10-69-2009-IA-III dated 08-12-2009**

	<b>Specific Conditions</b>	<b>Compliance Status</b>
(i)	All the conditions stipulated by Environment Department, Government of Gujarat as contained in their letter No ENV-10.2003-55-P1 dated 15th July 2003 shall be effectively implemented. The project shall be implemented in such a manner that there is no damage whatsoever to the mangroves/ other sensitive coastal ecosystems. Further no portion of the project site should be located in CRZ I (i). If any damage to mangroves is anticipated/ envisages as a result of project activities then the clearance now being accorded shall stand cancelled and the proponents may seek fresh approval from the Ministry.	<b>Complied with.</b> Status of specific conditions mentioned in MOEF clearance letter for revised route dated 24 <sup>th</sup> May 2004 is given in part III and V. Additionally 14 km pipeline is also planned to be installed for which approval process is under progress.
(ii)	All conditions stipulated by Gujarat Pollution Control Board vide letter No PC-NOC-SRT/1240/8997 dated 24th March 2003, shall be effectively implemented.	<b>Complied with.</b>
(iii)	It should be ensured that no activities are taken up in the forest areas till necessary forest clearance is obtained and furnished to this Ministry.	<b>Complied with.</b> Forest clearance has been obtained. Presently the Pipeline is Operational. For additional new pipeline of 36 inch, Forest clearance is being taken under Forest conservation act.
(iv)	It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.	<b>Complied with.</b>
(v)	It shall be ensured that due to the project there is no adverse impact on the drainage of the area and recharge of groundwater. No groundwater should be tapped in the project area falling in Coastal Regulation Zone.	<b>Complied with.</b>
(vi)	The project proponents must make necessary arrangements for disposal of solid wastes and for the treatment of effluents/ liquid wastes. It must be ensured that the effluents/ liquid wastes are not discharged into the backwater.	<b>Complied with.</b> Waste management plan is in place for all kind of waste disposal.
(vii)	The camps of labour shall be kept outside the Coastal regulation Zone area. Proper arrangements for cooking fuel shall be made for the labour during construction phase so as to ensure that mangroves are not cut/ destroyed for this purpose.	<b>Noted and complied with during construction phase.</b>
(viii)	Regular drills should be conducted to check the effectiveness of the on-site Disaster Management Plan. The recommendations made in the Environmental Management Plan and Disaster Management Plan, as contained in the Environmental Impact Assessment and Risk Analysis reports of the project, shall be effectively implemented.	<b>Complied with.</b> The same way compliances of Risk Assessment , EMP and DMP submitted for project expansion vide letter HPL/MoEF/Expansion/2013/1 dated 20th November, 2013.
(ix)	The entire stretch of the pipeline shall be buried except at the booster pumping station, which will be properly fenced and the station would be manned round the clock. The buried lines will be protected with anti-corrosive coaltar based coating. The coating will be tested by high voltage detector in accordance with prescribed standards.	<b>Complied with.</b> The Gas pipeline has been constructed as per international and practices on Natural gas pipeline.
(x)	Markers shall be installed at every 30 m to indicate the position of the line.	<b>Complied with.</b>

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SI No	Specific Conditions	Compliance Status
(xi)	The smooth and safe operation of the system will be ensured by incorporating a computerized SCADA system. Any leakage in the pipe shall be immediately detected by the Computer system and product pumping shall be immediately cut off.	Data acquisition and management system has been installed to collect pipeline data and transmit the same data to the computerized Plant Digital Control System (DCS).  We have remote operated isolation valves on pipeline route at 4.2km distance from terminal.
(xii)	Regular patrolling of the pipeline needs to be done. This will help in identifying any activity that have the potential to cause pipeline damage to identify small leaks whose effects are too small to be detected by instrument.	<b>Complied With:</b> The line is 1.5 m below GL. Weekly Patrolling of pipeline is undertaken during operation phase. There is round the clock 24 x 7 monitoring of the pipe line by a dedicated team.
(xiii)	There should be display boards at critical locations along the pipeline, viz., road/rail/river crossings giving emergency instructions as well as contact details of HLPL. This will ensure prompt information regarding location of accident during any emergency. Emergency information board should contain instructions in addition to contact details.	<b>Complied with.</b>
(xiv)	During operation phase, proper precautions should be taken to avoid any oil spills and no oily wastes shall be discharged into the water bodies.	<b>Complied with.</b> It is a dry gas line and therefore, no chance of oil spillage.

### B. General Conditions

SI No	General Conditions	Compliance Status
i	Construction of the proposed structures should be undertaken meticulously confirming to the existing Central/ local rules and regulations. All the construction designs/ drawings relating to the proposed construction activities must have approvals of the concerned State Government/ Agencies.	<b>Complied with.</b> All necessary clearances taken.
ii	The project authorities should take appropriate community development and welfare measures for the villagers in the vicinity of the project site, including drinking water facilities. A separate fund should be allocated for this purpose.	<b>Complied with.</b> Community development plan (Called SOCIAL PLAN) is implemented with adequate resources and budget <b>Refer Annexure-A</b> for social performance.
iii	To meet any emergency situation, appropriate fire fighting system should be installed. Appropriate arrangements for uninterrupted power supply to the environment protection equipment and continuous water supply for the fire fighting system should be made.	<b>Complied with.</b> Gas Pipeline fires can't be extinguished with water and foam. DCP powder and CO2 extinguishing systems have been provided.
iv	A separate Environment Management Cell with suitably qualified staff to carry out various environment related functions should be set up under the charge of a Senior Executive who will report directly to the Chief Executive of the Company.	<b>Complied with.</b> A separate Environment Management Cell has been established. Kindly refer to <b>Annexure-B</b> .

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Sl No	General Conditions	Compliance Status
(v)	The funds earmarked for environment protection measures should be maintained in a separate account and there should be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards should be reported to this Ministry's Regional Office at Bhopal.	<b>Noted and complied with.</b> Yearly expenditure Jan 2013 to December 2013 period is enclosed as <b>annexure-C</b>
(vi)	Full support should be extended to the officers of this Ministry's regional office at Bhopal and the officers of the central and the state pollution control board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.	<b>Complied with.</b>
(vii)	In case of deviation in the project including the implementing agency, a fresh reference should be made to this Ministry for modification in the clearance conditions or imposition of new one for ensuring environmental protection. The project proponents should be responsible for implementing the suggested safeguard measures.	<b>Noted and complied with.</b> For additional new pipeline of 36 inch, Environmental Clearance process is ongoing. Public hearing is conducted on 9 <sup>th</sup> November, 2012 for expansion up to 10 MMTPA.S
(viii)	The Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	<b>Noted.</b>
(ix)	The Ministry of any other competent authority may stipulate any other additional conditions subsequently, if deemed necessary, for environmental protection, which shall be complied with.	<b>Noted.</b>
(x)	A copy of the clearance letter shall be marked to the concerned Panchayat/ local NGO, if any, from here any suggestion/ representation has been received while processing the proposal.	<b>Complied with.</b>
(xi)	The State Pollution Control Board/ Committee should display a copy of the clearance letter at the District Industries Centre and Collector's office/ Tehsildar's office for 30 days.	<b>Noted.</b>
(xii)	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Gujarat State Pollution Control Board and may also be seen at website of the MoEF.	<b>Complied with</b> on 12 <sup>th</sup> Nov 2003. The pipeline is operational.
(xiii)	The project proponents should inform Regional Office at Bhopal as well as this Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of work.	<b>Complied with during the construction phase.</b>
(xiv)	The project proponent will obtain the forest clearance for the land passing through the Reserved Forest area as well as report of the public hearing before commencement of the project activities in forest area.	<b>Complied with</b> during project phase.
(xv)	So as to maintain ecological features and avoid damage to the ecosystem, movement of vehicles in the inter-tidal Zone shall be restricted to the minimum.	<b>Complied with.</b>
(xvi)	Since the pipeline passes along mangrove areas and the mudflats of Tapi river, the project proponents will ensure adequate protection to the mangroves.	<b>Complied with during project phase.</b>

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Sl No	General Conditions	Compliance Status
xvii	650 trees are proposed to be cut along the pipeline corridor. Details regarding the clearances obtained for cutting the 650 trees and compensatory tree plantation at twice the number of trees cut may be provided.	<b>Complied with.</b> Reference MOEF clearance for change of pipeline route dated 24 <sup>th</sup> May 2004, 450 trees are expected to be removed in the pipeline corridor.
xviii	Budgetary break-up for Environmental Management Plan for the project to be mentioned.	Yearly expenditure will be reported to the MoEF in January, 2013 (Jan-December 2012 period) for the Environmental Management.

### Section II

**Additional Specific Conditions by MOEF (J-16011/20/2003-IA-III, dated 24<sup>th</sup> May 2004, partial amendment to earlier Environmental Clearance dated 24<sup>th</sup> Oct. 2003)**

Sl No	Specific Conditions	Compliance Status
3 (i)	Project proponent shall be solely responsible and shall compensate for any loss or damage to the life of human beings and animal health and property	<b>Complied With.</b> Third party Liability insurance includes pipeline operation.
3 (ii)	The conditions stipulated by the Forest & environment department, GoG vide letter no. ENV-10.2003-55P dated 17 <sup>th</sup> March 2004 should be implemented strictly.	<b>Complied with.</b>
3 (iii)	The new pipeline will not enter in reserved forest area	<b>Complied with.</b> Re-routing of pipeline was worked out with an intension to avoid reserved forest.
3 (iv)	Conditions stipulated by GPCB vide letter no. PC/NOC/SRT-1240/1318 dated 16 <sup>th</sup> January 2004 should be strictly implemented.	<b>Complied with, see section-IV</b>

**Compliance to conditions imposed as part of Environmental Clearance accorded by Ministry of Environment & Forests, Government of India**

### Section III (Letter Reference No:ENV-10—2003-55-E) dated August 24<sup>th</sup>, 2009)

**Amendment to letter no J-16011/20/2003-IA-III, dated 24<sup>th</sup> May 2004 to CRZ clearance for re-routing of a section of the sendout and laying of water pipeline along the re-routing send out line vide letter no 8<sup>th</sup> December, 2009.**

All conditions are the general condition for which the company is complying with the requirement.

Sl No	Specific Conditions	Compliance Status
1	All the land for re-routing of of the pipeline for the forest land shall be within the 34 hectares of the the forest land already diverted for non-forest uses by MoEF.	<b>Complied With.</b>
2	No-Forest Land shall be used for laying of re-routing of the gas pipeline and the water pipeline, which is not diverted for non-forest uses by the MoEF.	<b>Complied with.</b>

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3	The new pipeline will not enter in reserved forest area	<b>Complied with.</b> Re-routing of pipeline was worked out with an intension to avoid reserved forest.
4	All the recommendation and suggestions given by NEERI in their above mentioned EMP shall be strictly implemented by the HLPL and the ESSAR Limited for the laying and operation of the said pipeline.	<b>Complied with during project and operation phase.</b>

## Annexure-A-

Month wise Information related to Social Performance is given below.

### Oct-2013

Dr. Maity has visited mangrove sites includes new plantation area of 50 ha. (Finding: plantation was as per technical parameters).

- Focus capacity building: Sponsorship & Scholarship provided to 16 students for first semester in presence of DEO and parents.
- Carrying and sharing drive: cloths donated to total 348 children.
- Road safety event organized (two events).

### Nov-2013

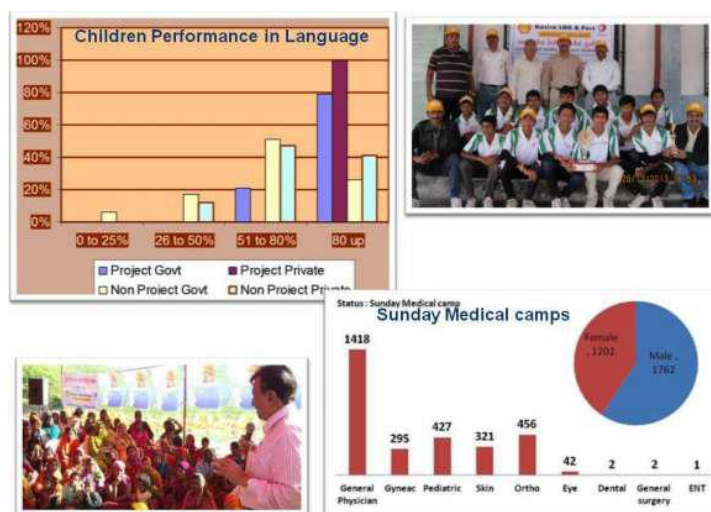
Mangrove Plantation-Land demarcation survey completed through D-GPS. Advance equipment and techniques was utilized to provide the accuracy of measurement up to cm level. (Maps shows total plantation area 1347 ha included 119 ha new plantation in 2013)

- 3 day- Teachers workshop on English: 40 teachers participated during Diwali vacation, where Dr A.L.Khanna (Retired professor) -University of Delhi has facilitated on key topics of Nature of English language, pronunciation and grammar. The DPEO also visited this workshop and appreciated such efforts.
- The DPEO and District Edu.dept team visited the terminal as chairman of our FCB committee. This engagement has created positive and mutual trust environment.
- One day workshop organized on teaching -learning materials (TLM) development, where eight types of TLMs for Maths, from the site's waste materials-thermocool pieces were created.
- Collaboration in four events of Khel Mahakumbh- Hazira and Damka by providing lemon juice & Parle biscuits, where 650 players participated from the Choryasi taluka.



## December-2013

- ✓ Impact studies completed: Mangrove centric ecological impacts related two studies (D-GPS & satellites) & one study on education impact.
- ✓ Classroom interaction remains an area of concern across the schools (Details graphs and conclusions of all three studies will be circulated separately)
- ✓ Sunday medical camp: four organized in Dec 2013 and 277 patients treated (cum. 2964 patients). Break up attached in photo.
- ✓ Hazira dispensary: 1298 patients treated in Dec 2013 & 14184 patients in 2013 (cum. 63872 patients)
- ✓ School level cricket tournament organized, where 8 team played - Junagam high school won the match Natural Gas pipeline safety awareness campaign held for local community with attendance of 200+ on 22nd December



## Jan14

Polio immunized to 3618 children (cum 82452)

- ✓ Topical Participatory Rural Appraisal- TPR Survey done in nine villages for the Mobile learning Centre-MLC ( *Fartu pravuti Kendra ane pustakalay*) to develop reading habits.
- ✓ Supported- inaugurated MLC by taking process - design lead and also provided books and puzzles for the MLC in collaboration with VBS.
- ✓ Participated in UDYOG 2014 (30000+ visitors visited in our stall, 500+ visitors have spent their 15 minute time to play our quiz on SP activities). SGCCI and senior visitors have appreciated Hazira theme.
- ✓ Three "Sunday -medical camp" organized in Jan-14 ( Total patients treated 162 and cum 3126 )

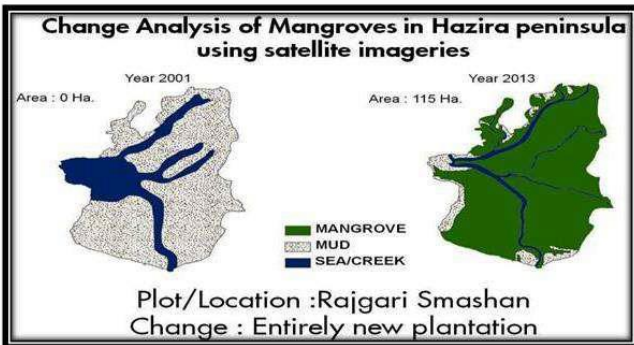




Feb 2014

Satellite based comparative study done on mangrove growth from 2001 to 2013 (sample photo of one plot out of 9 plots).

- ✓ Horticulture sapling survival rate study started and ongoing in 9 villages.
- ✓ Polio immunized to 3288 children- 23<sup>rd</sup> Feb.-second round 2014 ( cum 85740)
- ✓ Road safety awareness camp organized through pamphlet distribution by volunteer (covered 450 public vehicle drivers on Surat –Hazira road.
- ✓ Four “Sunday –medical camp” organized in Feb-14 (Total patients treated 224 and cum 3350)
- ✓ 19 youth sponsored (10<sup>th</sup> batch-2014) for technical courses of “Fireman Course” and “Fire Technology & Industrial Safety Management Course” - under capacity building program. HGC leadership and CCT members have motivated to students during send off ceremonial event.



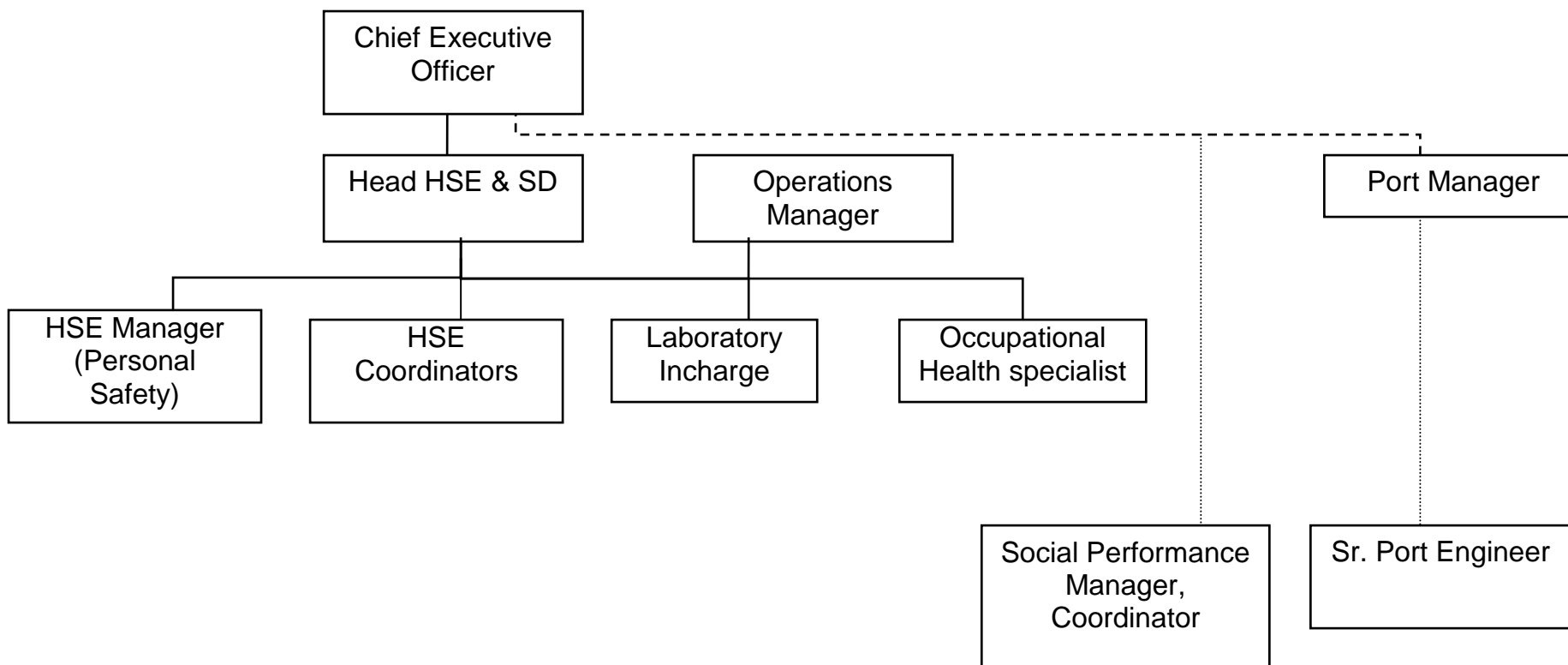
March 2014

FCB –Scholarship given to six students ( cum 22 out of 52 identified students from fishermen group)

- ✓ Four “Sunday –medical camp” organized in March-14 (Total patients treated 197 and cum 3547)
- ✓ Supported to Hazira GP for the installation of “Reverse Osmosis Drinking Water system (RO plant), where all 500+ Hazira families are using the safe and good drinking water every day.
- ✓ International Women day celebrated through “Gender sensitization workshop” with Shell staff and school staff.



ENVIRONMENTAL MANAGEMENT CELL



## Annexure-C

Environment Expenses - : BUDGET UTILISATION (Jan -december 2013) INR in lakhs		
Sr.No	Terminal and Port	Operating Cost( INR in lakhs)
		<b>43.35</b>
<b>ENVIRONMENT</b>	Treatment of sewage and Accidental spilled oil	10
	Waste Management - Collection, Treatment, Transport, Recycling	24
	Env Monitoring cost	0.8
	Consultancy fees	2
	ISO 14001 : 2004 Certification process	1.43
<b>SP Main component</b>	<b>sub component</b>	<b>140.64</b>
<b>Ecology and Environment</b>	Mangrove Plantation cost	25.73375
	Mangrove recurring & Protection cost to GVPS	1.04329
	Non mangrove tree and horticulture	18.86794
	<b>Nature Education</b>	10.73
	port plantation plantation	4.5
	SUB.TOTAL	60.86998
<b>Education and capacity Building</b>	Primary Education	34.98
	<b>Employability and capacity building</b>	3.51
	other prog in education ( High school)	5.9229
	school prog and Activity centre	0
	SUB.TOTAL	44.41776
<b>Health and sanitation</b>	<b>Dispensary operation</b>	6.86
	Waste disposal and sanitation	1.5
	medical camp and polio etc	0
	HIV- AIDS, medical camp, polio	12.022
	<b>SUB.TOTAL</b>	20.39
<b>CR and Stakeholder expectation</b>	Resource centre development	5.05428
	Community Building/GVPS mangrove grant management/trg/exposure	14.33807
	Safety-Gas pipeline- campaign	4.13729
	<b>SUB.TOTAL</b>	23.53
	Survey,Audit,Reserch, review etc	14.97122
	Total Expenditure	<b>183.99496</b>