

सत्यमेव जयते

भारत सरकार GOVERNMENT OF INDIA

पर्यावरण, वन एवं जलवायु परिवर्तन

मंत्रालय

MINISTRY OF ENVIRONMENT, FOREST &

CLIMATE CHANGE

SPEED POST

क्षेत्रीय कार्यालय, पश्चिम क्षेत्र, Regional Office, Western Region, "केन्द्रीय पर्यावरण भवन" "Kendriya Paryavaran Bhavan" लिन्क रोड नं0-3/Link Road No. 3 E-5, रविशंकर नगर/Ravi Shankar Nagar, भोपाल (म0प्र0)/Bhopal-462016 (M.P.) Telefax: 0755-2465054 E-mail: ajay.mehrotra13@gov.in

कमांक: 5-251/2008(ENV)/325

दिनांक: 6.7.2015

प्रति,

डॉ. ललित बोकोलिया, वैज्ञानिक 'ई', पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, जोर बाग रोड, अलीगंज, नई दिल्ली - 110003

विषय: Drilling of development wells in the On-land Oil Fields of Ahemdabad asset in Gujarat by M/s ONGC Ltd. – reg.

संदर्भ: Ministry's letter no. J-11011/218/2008- IA II (I) dated 3.7.2008.

महोदय,

मंत्रालय के उपरोक्त संदर्भित पत्रांकों के संदर्भ में उक्त परियोजना को पर्यावरणीय दृष्टिकोण से अनुमति देते समय अनुबद्ध शर्तों के अनुपालन एवं certification of compliance की अनुवीक्षण प्रतिवेदन (मॉनिटरिंग रिपोर्ट) एतद् द्वारा संलग्न कर प्रेषित है । अनुवीक्षण प्रतिवेदन मंत्रालय की वेबसाइट पर भी अपलोड की जा रही है ।

भवदीय

संलग्नः उपरोक्तानुसार

प्रतिलिपि: Shri Sanjay Varshney, Suptdg. Chemist, M/s ONCG Ltd., Ahmedabad Asset, Avani Bhavan, Chandkheda, Ahmedabad – 380 005– for information.

Monitoring the Implementation of Environmental Safeguards Ministry of Environment, Forest & Climate Change Western Region, Regional Office, Bhopal MONITORING REPORT PART – I DATA SHEET

1	Project type: River- valley/ Mining/ Industry / Thermal / Nuclear/Other (specify)	:	Industry
2	Name of the project	:	Drilling of development wells in the On-land Oil Fields of Ahemdabad asset in Gujarat by M/s ONGC Ltd.
3	Clearance letter (s)/OM No. & date	:	J-11011/218/2008- IA II (I) dated 3.7.2008
5	 Location: a) District (s) b) State (s) c) Location Latitude/Longitude Address for correspondence a) Address of the Concerned Project Chief Engineer (with Pin Code & telephone/ telex/ fax numbers) b) 		Ahmedabad Gujarat As mentioned in EIA Shri Yash Malik, ED – Asst. Manager, M/s ONGC, Avani Bhavan, Chandkheda, Ahmedabad – 380005 Tel: 079 – 23290050, Fax: 23291289
	c) Address of Executive Project Engineer / Manager (with Pin Code/fax numbers)	:	Shri Sanjay Varshney, Suptdg. Chemist, M/s ONCG Ltd., Ahmedabad Asset, Avani Bhavan, Chandkheda, Ahmedabad – 380 005
6	Salient features a) Of the project b) Of the EMP		 a. Project was pertaining to drilling of development oil & gas wells of Ahmedabad Asset for 2007-2012. b. All the drilling rigs of the Asset deployed for drilling above mentioned oil & gas wells maintained by third party certified quality, health, safety and environment management system.
7	Break up of the project areaa) Submergence area: forest & non-Forestb) Others	:	The area involved 6200 km ² . Approx. 70% wells have been drilled from the old locations (cluster wells) for which no extra land were acquired. For remaining wells, non agricultural land is normally acquired.
8	Break up of the project affected population with enumeration of those losing houses/dwelling units only agricultural land only, both dwelling units & agricultural land & landless laborers/artisans: a) SC, ST/Adivasi	:	NA

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×	1	-	
	b) Others	:	
	(Please indicate whether these figures are based		
	on any scientific and systematic survey carried		
	out or only provisional figures, if a survey is		5 C
	carried out give details & year of survey)		
9	Financial details:		
	a) Project cost as originally planned and		Total cost of drilling: Rs. 626 Cr. (approx.)
	subsequent revised estimates and the year of		
	price reference		
	b) Allocation made for EMP with item wise and	:	Details not provided
	year wise break-up		1
	c) BC ratio/IRR and the year of assessment	:	Details not provided
	d) Whether © includes the cost of EM as shown		Details not provided
	in the above		
	e) Actual expenditure incurred on the project so		Details not provided
	far		D'etallo not provided
	f) Actual expenditure incurred on the EMP so		Details not provided
	far		Details not provided
10	Forest land requirement		NA
	a) The status of approval for diversion of forest		
	land for non-forestry use		
	b) The status of clearing felling.		
	c) The status of CA, if any		
	d) Comments on the viability & sustainability		
	of CA program in the light of actual field		
	experience so far		
11	The status of clear felling in non-forest areas		NA
	(Such as submergence area or reservoir,		1 1 1 K
	approach Roads.), if any with quantitative		
	information required.		
12	Status of construction (Actual &/or planned)		Only temporary structure/hardening was carried
1-	a) Date of commencement		out to deploy drilling rig. After completion of
	b) Date of completion	:	drilling, the land was restored.
13	Reasons for the delay if the project is yet to start	:	NA
14	Dates of site visits		
17	a) The dates on which project was monitored		
	by RO on previous occasions, if any	•	-
	b) Date of site visits for this monitoring report	20	0 10 4 2015
15	Details of correspondence with PA for obtaining	•	9-10.4.2015 As below
15	act on plans/information on status of compliance	•	AS UCIOW
	to safeguards other than the routine letters for		
	logistic support for site visits. (The first		
	monitoring report may contain the details of all		
	the letters issued so far, but the later reports may		
Da	cover only the letter issued subsequently).		
$\frac{\mathbf{D}a}{14.1}$			ate Reply from P.A.
14.1	.09 Present status, point wise compliance, Form-I, TOR, CTE/CTO, copy of advertisement, data	2	7.4.09 Req. information sub.
	sheet req.		
	sheet feq.		

	12.11.09 Compliance & analytical reports sub.
	15.4.10 Compliance & analytical reports sub.
	11.11.10 Six monthly compliance, analytical reports & well wise compliance sub.
	19.4.11 Six monthly compliance, analytical reports & well wise compliance sub.
	29.10.11 Six monthly compliance, analytical reports & well wise compliance sub.
	9.7.2014 Compliance certification req.
	11.8.14 Compliance certification req.
22.8.14 CTE/CTO, EIA/EMP, show cause notices/ closures, details of court cases, ES Form-V, expenditure incurred on EMP, status of uploading, FC, data sheet, coordinates of wells, chronology of events, TOR, copy of minutes req.	29.9.14 Incomplete information sub.
	27.10.14 Compliance certification req. after sub. of reports
	26.2.15 Compliance certification req. after sub. of reports
	25.3.15 Details of public hearing sub.
	24.4.15 Improvement report of hazardous waste area sub.

PART – II & III DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT O.M. No.: J-11011/218/2008-IA.II (I) dated 3.7.2008

It was learnt during the visit that the first well of the asset, Kalol-1 was established in 1961. Since then a total of 29 hydrocarbon – bearing fields have been discovered, out of which 7 small producing fields (Dhokla, Bakrol, wavol, Sabarmati, Indrora, Lohar and Balol) have been privatized and another (Ognaj and Karjisan) was under bidding. The remaining 20 fields have been divided into 4 areas for operational convenience.

There are 63 production installations, which include 25 group stations (GGS), 5 effluent treatment plants (ETP) and early production systems. ETP of group gathering station – 3 is situated at Pansoli, Matar, District: Kheda and receives effluent from GGS I, GGS II & GGS III at Nawagam.

PA has submitted the following details during the visit. Some of the sites were visited for verification of compliance conditions.

Place	Wells	Area/Fields	Drilled
Ramol	20	Ι	
Kalol	70	I – Kalol, Wadu-Paliyard & Motera	
Nandej	15	II – Ahmedabad, Nandej, Wasna, Nawagam, Sadra, Mahelaj	_
Wasna	20	II	- 7
Nawagam	30	II	
Sadra	13	II	-
Jhalora	7	III – Jhalora, South Kadi, Sanand, Viraj, South Viral	
South Kadi	12	III	6
Sanand	9	III	
Limbodra	imbodra 29 IV – Limbodra, Gamij		
Gamej	20	IV	- 4
	245		

SPEC	SPECIFIC CONDITIONS				
1.	The company shall pay compensation for acquisition of private land as per the Central Govt./State Govt. norms. The compensation to be paid to the land loser shall not be less than the norms/package as per the Policy on National Resettlement and Rehabilitation Rules, 2007.	Complied. It was submitted that land acquisition department of the Ahmedabad asset has acquired lands in accordance to Central Govt./State Govt. norms. The adequate compensation has been provided to land owners as per laid down guide lines.			
2.	The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR 546(E) dated 30.8.2005.	Partly Complied. It was submitted that solid waste, drill cutting, left over drilling fluid and waste water were disposed off in a pit of appropriate size and lined with HDPE as submitted (Photos $1 - 6$). Other waste like spent oil, batteries, drums were recycled through central store of the asset and waste like cotton waste, empty chemical bags, filters etc was			

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		subjected to secured landfill of which asset holds membership. It was observed from the EA report 2013 for GGS-III that quantity of hazardous waste was within the limits. The latest copy of membership of TSDF was not submitted. The details of waste disposal were not submitted in order to verify the implementation of the condition. It was noted during the visit that ES Form-V was submitted regularly. PA was directed to submit the holistic details before EAC.
3.	The surface facilities shall be installed as per applicable codes and standards, international practices and applicable local regulations.	Complied. PA has submitted that surface facilities of drilling operations were in compliance to Mines Act 1952, Mines Regulations 1955, OMP 1984, APIs and Guidelines from Oil Industry Safety Directorate.
4.	Drilling waste water including drill cuttings wash water shall be collected in disposal pit lined with HDPE lining evaporated or treated and shall comply with the notified standards for on-shore disposal. The membership of common TSDF shall be obtained for the disposal of drill cuttings and hazardous waste. Otherwise secured land fill shall be created at the site with the Authorization of the SPCB. The design of the secured shall be approved by the SPCB.	Same as mentioned above in condition no. 2.
5.	The recyclable waste (oily sludge) and spent oil shall be disposed to the authorized recyclers.	Partly Complied. Spent oil, empty drums of POL and Chemicals and batteries were recycled through central stores of asset as submitted. However, details of yearly disposal were not submitted. PA was directed to submit the details before EAC.
6.	Only water based drilling mud shall be used. The drilling mud shall be recycled. In case of use of synthetic oil based mud due to any problem due to geological formation for drilling, low toxicity, OBM having aromatic content < 1 % shall be used. If it is intended to use such OBM/SBM to mitigate specific hole problem, it should be intimated to MOEF/ SPCB.	Complied. Water based mud was being used and wherever possible mud was reused in the system (Photos 7 – 9).
7.	The oily sludge shall be sent to TSDF for incineration.	Complied. PA has submitted that no oily sludge was produced. However, status as observed at various GGS sites is shown in Photos $10 - 12$.
8.	Quantities of storage & chemicals and additives required for drilling mud preparation shall be below the specified threshold for specified storage permitted under the MSIHC Rules.	Complied. The chemicals at drill sites were stored in quantities below regulatory quantities as intimated during the visit.
9.	Pre hire rig inspection, safety meetings, tool box meeting, job safety analysis and audits shall be	Complied. Spud in meetings was held before drilling any well wherein all significant health

	carried out to identify hidden /potential hazardous.	safety an environmental aspects were covered. It was submitted that all the drilling rigs of ONGC Ahmedabad Asset were being maintaining by third party certified QHSE management system which has provisions of various safety and HSE review meetings.
10.	The company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	Complied. PA has submitted that adequate firefighting equipments have been placed in each drilling rig. Drill sites have been restored to near original conditions after drilling activities are over.
11.	The company shall take necessary measures to reduce noise levels at the drill site by providing mitigation measures such as proper acoustic enclosures to the DG set and meet the norms notified by the MOEF. Height of all the stacks/vents shall be provided as per the CPCB guidelines.	Partly Complied. It was submitted that noise surveys were carried out at drill sites and areas of high noise have been identified and marked. DG sets were provided with mufflers and enclosures to reduce noise levels. Working personnel were also provided ear muffs in high noise areas. Regular maintenance of equipment / pumps etc. was being carried out. However, no monitoring report was submitted for the duration of exploration except EA report 2013 for GGS-III which shows noise level was within the permissible limits at the station.
12.	To prevent fire and explosion at Oil and Gas facility, potential ignition sources should be kept to a minimum and adequate separation distance between potential ignition sources & flammable material should be in place.	Complied. Horizontal and vertical hazardous zones (Zone 1 and Zone 2) as per OMR 1984 and guidelines issued by Directorate General of Mines safety have been identified. Flame proof fittings have been provided in these areas.
13.	The company shall develop a contingency plan for H ₂ S release including all necessary aspects from evacuation to resumption of normal operations. The workers should be provided with personal H ₂ S detectors in locations of high risk of exposure along with self containing breathing apparatus.	Not Complied. PA has submitted that hydro carbons of oils fields of Ahmedabad asset do not have H_2S gas. It was understood during the visit that no contingency plan was prepared for the sites. PA was directed to explain and submit the reports, if any, before EAC during final appraisal.
14.	To prevent well blowouts during drilling operations, BOP system shall be installed. Blow Out Prevention (BOP) measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.	Complied. Set of BOPs were in place in each drilling rig as placed. Regular BOP drills have been carried out and recorded.
15.	The company shall take measures after completion of drilling process by well plugging and secured enclosures, decommissioning of rig upon abandonment of the well and drilling site shall be restored to near original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be	Complied. It was submitted that abandonment of wells wherever applicable have been carried out as per oil mines regulations 1984 and OISD guidelines. Further, restoration was also carried out after completion of drilling process.

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	implemented for the drilling site in accordance with applicable Indian Petroleum Regulations.	
16.	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Complied. Periodical medical examination of personnel was being carried out at frequency based on age group. Frequency of PME for personnel below 45 yrs. is five years whereas it is 3 years and 2 years respectively for age groups – 45 yrs to 55 yrs and above 55 years.
17.	Permission shall be obtained for drawl of ground water from the state government authorities / CGWA as applicable in this case.	Complied. It was submitted that water used at drill sites have been taken from local water bore wells, bore wells of ONGC's installations and ONGC residential colony. These bore wells have been permitted by the concerned authorities. Water cess was being regularly paid to GPCB. Thus, condition was considered as complied.
18.	Measures shall be taken for rain water harvesting to recharge the ground water.	Complied. It was submitted and noted during the visit that some installations of Ahmedabad asset and residential colony have recharging wells for rainwater harvesting.
GEN	ERAL CONDITIONS	
1.	The PA must strictly adhere to the stipulations made by the Gujarat SPCB and the State Govt.	Partly Complied. PA has not submitted CTE for wells after the grant of EC. It was observed and noted during the visit that 15 wells were drilled during 2014-15. PA has submitted CCA for GGS operating in the area. CCA for GGS-III is valid up to 24.9.2015 which receives effluent from GGS-III (Kalol), GGS-4, 9 (Kalol), GGS-5 (Kalol), GGS-6 (Kalol) and Vadu. The monitoring of air and water quality in GGS was being carried out on six monthly but the reports were not submitted. The monitoring during the drilling operation was also not submitted except Sep. 2010 of one drilling station. PA was directed to submit monitoring reports. quantitative details of generation & disposal of hazardous waste & solid waste in future.
2.	No further expansion or modification in the project shall be carried out without prior approval of the MOEF. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Agreed to Comply. PA has submitted that the condition is "Noted for compliance" and assured to abide by the condition.
3.	The emissions of (RSPM, SPM, SO ₂ , NO _X , HC & VOC) from DG Set and from flare stack shall conform to the standards prescribed by the SPCB. Regular monitoring of ambient air for HC	Partly Complied. PA has submitted analytical reports of DG sets, drilling rig for Sep. 2010 only which do not show anomaly. Thereafter, no such reports were submitted. Stack height was

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-	and VOC shall be carried out as per CPCB guidelines. Stack height attached to DG sets shall be in-conformance with the environment protection acts and rules.	provided as per the norms as submitted. It was noted from EA 2013 that AAQ was monitored at one station on quarterly basis at GGS-III. Parameters were found within the limits.
4.	The PA must strictly comply with the rules and regulations under MSIHC Rules, 1989 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Complied. It was submitted that approvals from Directorate General of Mines Safety, Controller of explosives etc. have been obtained as per norms. Further, provisions of MSICH Rules, 1989 were also implemented as added.
5.	The PA must strictly comply with the rules and regulation with regard to handling and disposal of HWMH Rules, 1989/ 2003 wherever applicable. Authorization from the SPCB must be obtained for collections/treatment/storage/ disposal of hazardous wastes.	Same as mentioned above in specific conditions no. 2 & 4.
6.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	Same as mentioned above in specific condition no. 11.
7.	A separate EMC equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	Partly Complied. It was submitted that environment management group is integrated part of assets health safety and environment management. However, details of EMC were not submitted. PA was directed to submit the details before EAC during final appraisal.
8.	The PA will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the MOEF as well as the State Govt. along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Partly Complied. It was observed during the
9.	The RO of this Ministry at Bhopal/CPCB/SPCB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Partly Complied. Six monthly reports along with monitoring data were not submitted regularly as evident from point no. 15 of data sheet. RO Bhopal has monitored the project as per the condition.
10.	The PP shall inform the public that the project has been accorded EC by the Ministry & copies of the clearance letter are available with the SPCB/Committee & may also be seen at website of the MOEF at www.envfor.nic.in. This shall be advertised within seven days of the issue of this letter in at least two local newspapers that are	Partly Complied. PA has published regarding grant of EC in local newspaper namely, Times of India dated 29.8.2008. The clause of seven days and publication in two newspapers was not followed as per the details submitted.

	widely circulated in region of which one shall be	
	in vernacular language of the locality concerned.	
11.	The PA shall inform the RO 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.	Not Complied. PA has submitted that condition is not applicable as drilling activities in asset is not a new project and these activities are happening since 1961. Neither PA has approached Ministry for suitable amendment in the condition nor were details submitted. PA was advised to take up the matter before EAC during final appraisal of proposed expansion.
12.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Agreed to Comply. PA has submitted that the condition is "Noted" and assured to abide by the condition.
13.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	Agreed to Comply. PA has submitted that the condition is "Noted" and assured to abide by the condition.
14.	The above conditions will be enforced, inter-alia under the provisions of the Water (P & CP) Act, 1974, the Air (P & CP) Act, 1981, the EP Act, 1986, HWMH Rules, 1989, 2003 and the PLI Act, 1991 along with their amendments & rules.	Partly Complied. It is inferred from the above mentioned review that majority of the conditions pertaining to drilling wells and its safety aspects were complied but reporting system of monitored data during drilling operation and of GGS system covering the area along with compliance report requires sincere attention. PA has not submitted CTE for wells after the grant of EC. It was observed and noted during the visit that 15 wells were drilled during 2014-15. PA has submitted CCA for GGS operating in the area. CCA for GGS-III is valid up to 24.9.2015 which receives effluent from GGS-III (Kalol), GGS-4, 9 (Kalol), GGS-5 (Kalol), GGS-6 (Kalol) and Vadu. The monitoring of air and water quality in GGS was being carried out on six monthly but the reports were not submitted. The monitoring reports of drilling operations were also not submitted except Sep. 2010 of one drilling station. PA was directed to submit monitoring reports, quantitative details of generation & disposal of hazardous waste & solid waste in future. Copy of PLI was not submitted.

END NOTE:

1. Chronology of events: PA has requested Regional Office of the Ministry for issuance of certification vide letter dated 9.7.2014 & 11.8.2014. The Regional Office had requested for information w.r.t. issuance of certification vide letter dated 22.8.2014. Requisite information was not submitted fully by PA vide letter dated 29.9.2014. PA had intimated that TOR and public hearing were not applicable. Later, public hearing document were submitted vide letter dated 25.3.2015. Proposed TOR was not submitted yet. Further, PA had submitted improvement report

vide letter dated 24.4.2015 on hazardous waste management after site visit carried out on 9-10.4.2015.

- 2. Implementation of Conditions: It is inferred from the above mentioned review that majority of the conditions pertaining to drilling wells and its safety aspects were complied but reporting system of monitored data during drilling operation and of GGS system covering the area along with compliance report requires sincere attention. PA has not submitted CTE for wells after the grant of EC. It was observed and noted during the visit that 15 wells were drilled during 2014-15. PA has submitted CCA for GGS operating in the area. CCA for GGS-III is valid up to 24.9.2015 which receives effluent from GGS-III (Kalol), GGS-4, 9 (Kalol), GGS-5 (Kalol), GGS-6 (Kalol) and Vadu. The monitoring of air and water quality in GGS was being carried out on six monthly but the reports were not submitted. The monitoring reports of drilling operations were also not submitted except Sep. 2010 of one drilling station. It was observed during the visit at GGS-II Jhalora, GGS-II Gamej, GGS Vadu and GGS Wasna that plantation and green belt was found satisfactory (Photos 13 14). PA was directed to submit monitoring reports, quantitative details of generation & disposal of hazardous waste & solid waste in future. Copy of PLI was not submitted.
- 3. **Housekeeping:** It was found satisfactory.
- 4. **Review w.r.f to MOEFs letter dated 30.5.2012:** The above mentioned report was prepared after site visit on 9-10.4.2015 for the proposed expansion.
- 5. Court Cases: PA has submitted that there is no court case against them over last five years.
- 6. **Uploading of compliance on web site:** EC, compliance status and analytical of the existing project could not verified from the website of the company. Ministry may like to take up with PA during appraisal.
- 7. **Public Hearing:** It was held at two places on 23.1.2015 & 29.1.2015. These were conducted by RO, GPCB, Gandhinagar & chaired by Res. Addl. Collector & Add. District Magistrate, Gandhinagar and RO, GPCB, Mehsana & chaired by Res. Addl. Collector & Add. District Magistrate, Mehsana respectively.
- 8. With regards to issuance of show cause/closure notices: PA has submitted that no show cause/closure notices issued over last five years.

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Photos 1-6: Showing status of waste storage pits at various sites

Photos 7 – 9: Showing status mud preparation, mud waters storage & reuse system





Photos 10 - 12: Showing of oil waste management at various GGS







Photos 13 - 14: Showing development of green belt at two GGS stations

