## Compliance status of conditions stipulated by MoEF while granting

## **Environmental clearance**

Basin: KG-PG Basin. Period: 1st April' to 30th to September' 2015.

Block: Godavari on-land PML (PEL 1B). Well names: RVP-1

EC No: J-11011/474/2010-IA II (I) dated 18th May, 2012.

No	Condition	Compliance status
110	A. Specific conditions:	Compilarioe states
i	As proposed, only 24 nos. exploratory wells shall be drilled. No additional wells shall be drilled without prior permission this Ministry.	Agreed to comply
ii	Decision of the High Court of AP in the matter of WP No 13341 of 2008 does not get prejudiced by this EC.	Noted for compliance
iii	Gas produced during testing shall be flared with appropriate flaring booms. The flare system shall be designed as per good oil field practices OISD guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.	Flare booms are provided for flaring gas during testing as per OISD guidelines. All OISD/CPCB/MoEF guidelines followed.
iv	Ambient air quality shall be monitored near the closest human settlements as per the NAAQ emission standards issued by the Ministry vide GSR No. 826(E) dated 16 <sup>th</sup> November'2009 for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO,CH <sub>4</sub> ,HC, non-methane HC etc.	Ambient air quality of the nearest village monitored as per NAAQ emission standards.
٧	Mercury shall be analysed in air, water and drill cuttings twice during drilling period.	Being complied
vi	Approach road shall be made pucca to minimise generation of suspended dust	Being complied
Vii	The Company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosures to the DG sets and proper stack height shall be provided as per the CPCB guidelines.	DG sets are housed in the deck with acoustic enclosures. DG sets have adequate stack heights as per norms. People working near the sets are provided with ear muffs.
viii	Total fresh water requirement from ground water source shall not exceed 25 m3/day/well and prior permission shall be obtained from the concerned authorities.	Fresh water requirement being met by tanker supply.
ix	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated waste water shall confirm to CPCB standards.	Constructed the garland drains all around the drilling site. Effluent water is being reused/re-cycled after treatment with mobile ETP.
х	Good sanitation facility shall be provided at the drill site. Domestic sewage shall be disposed-off through septic tank/ soak pit.	Being complied
xi	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 as per the design approved by the CPCB and obtain authorisation from the SPCB. Copy of the authorisation or membership of TSDF shall be submitted to Ministry's Regional Office at Bangalore.	Drilling waste water and drill cuttings wash water are collected in HDPE lined waste pit and left for solar evaporation.

xii	Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adapting proven technology. The recyclable waste (oil sludge) and spent oil shall be disposed of to the authorised recyclers.	Spent oil disposed of to the authorised recyclers.
xiii	Ground water analysis shall be carried out at different depth to stratification.	Ground water analysis being carried out
xiv	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 <sup>th</sup> August, 2005.	Compliance details are given in the GSR 546(E) compliance table below.
xv	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during flaring.	First aid, Fire fighting equipment provided as per OISD-189. Flaring is done through flare stack during testing for brief period only (1-2 days).
xvi	The Company shall develop a contingency plan for H2S release including all necessary aspects from evacuation to resumption of normal operations. The workers should be provided with personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.	No H <sub>2</sub> S is expected in the field. Portable H <sub>2</sub> S gas detectors are provided for monitoring.
xvii	The company shall carry out long term subsidence study by collecting baseline data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bangalore.	Land subsidence study is being undertaken by Delta studies institute, Andhra University. Copy of the 1st Interim report was sent to your office.
xviii	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations,. Blow Out Prevention measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging, etc.	BOP's are installed.
xix	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 the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with applicable Indian Petroleum Regulations. Remote monitoring of the site shall be done.	Dry wells are abandoned with plugs as per OMR-84
xx	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 implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations. Remote monitoring of the site shall be done.	Dry wells are abandoned with plugs as per OMR-84. Site restored back to original and handed over to the owner
xxi	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Periodic medical examination (PME) is done as per norms in authorized hospitals.
xxii	In case commercial viability of the project is established, the company shall prepare a detailed plan for development of oil and gas fields for the above block and obtain fresh clearance from the Ministry.	In case commercial viability established company will prepare and development plan and apply for fresh clearance from the Ministry.

xxiii	Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's	Being complied
	Regional Office at Bangalore.  Oil content in the drill cuttings shall be monitored by	Oil content in the drill cuttings
xxiv	some authorised agency and report shall be sent to the Ministry's Regional Office at Bangalore.	is being monitored by authorised agency.
xxv	Under corporate social responsibility (CSR), sufficient provision shall be made for health improvement, education, water and electricity supply	ONGC providing adequate funds under CSR scheme.
	etc. in and around the project.  Company shall have own Environment Management	HSE setup is functional in the
xxvi	Cell having qualified persons with proper background.	company to carry out these functions.
xxvii	Company shall prepare and circulate the environmental policy.	Being complied
xxviii	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drill site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.	MOEF approved EIA reports are available. Environmental protection measures suggested in the report are being adhered.
xxix	Drill site shall be at least 500m away from the school.	Noted for compliance.
i	B. General Conditions The project authorities must strictly adhere to the stipulations made by Andhra Pradesh State Pollution Control Board (APPCB), State Government and any other statutory authority.	The observations raised by the statutory authorities like APPCB, DGMS, OISD are compiled as and when raised.
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alternations 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.	Drilling activities are conducted as per the approval received from MoEF.
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, storage and import of hazardous chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc., must be obtained, wherever applicable.	Drilling operations are carried out as per DGMS OMR-84 and OISD standards. Handling of explosives approval is obtained from Chief Controller of Explosives.
iv	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 (day time) and 70 dBA (night time).	Acoustic enclosures are provided for the gen sets to minimise the noise levels with in specified limits. Ear muffs provided for the persons working near the gen sets. The ambient noise levels are being monitored regularly.
V	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	HSE setup is functional in the company to carry out these functions
Vi	A copy of the clearance letter shall be sent by the proponent to the concerned panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the local NGO, if any from whom suggestions/representations, if any, were received while processing the proposal. The clearance shall also be put on the web site of the company by the proponent.	Being complied

Vii	The project proponent shall upload the status of compliance of stipulated environment clearance conditions, including the results of the monitored data on their web site and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & non methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Being complied
Viii	The project proponent shall also submit six monthly compliance reports on the status of the compliance of the stipulated environmental conditions including the results of the monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective zonal of CPCB and the APPCB. The Regional Office of this Ministry at Bangalore/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions.	Being complied.
ix	The environmental statement for each financial year ending 31st March in the form-V is mandated to be submitted by the project proponent to the concerned state pollution control board as prescribed under the Environment (protection) Rules 1986 as amended subsequently, shall also be put on the web site of the company along with the status of compliance of environmental conditions and shall also be sent to the respective regional offices of the MOEF by email.	Exploratory drilling activity is of short duration for 3 to 4 months at particular site.
х	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the APPCB and may also be seen at Website of the Ministry and Forests at http://www.envfor.nic.in. This shall be advertised within seven days of the issue of this letter at least two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	Company policy and other relevant information being displayed in front of each locations. Details of the environmental clearance are published in the local newspapers.
хi	The Project Authorities shall 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.	All the project details are provided to the statutory authorities.

Period: 1<sup>st</sup> April' to 30<sup>th</sup> to September' 2015. Well names: KRAC and MSN-AA. asin: KG-PG Basin.

Block: Godavari on-land PML (PEL 1B).

EC No: J-11011/68/2011-IA II (I) dated 14<sup>th</sup> June, 2013.

No	Condition	Compliance status
A. Spe	ecific conditions:	
i	Gas produced during testing shall be flared with appropriate flaring booms. The flare system shall be designed as per good oil field practices OISD guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.	Flare booms are provided for flaring gas during testing as per OISD guidelines. All OISD/CPCB/MoEF guidelines followed.
ij	Ambient air quality shall be monitored near the closest human settlements as per the NAAQ emission standards issued by the Ministry vide GSR No. 826(E) dated 16 <sup>th</sup> November'2009 for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NO <sub>2</sub> , CO,CH <sub>4</sub> ,HC, non-methane HC etc.	Ambient air quality of the nearest village monitored as per NAAQ emission standards.
iii	Mercury shall be analysed in air, water and drill cuttings twice during drilling period.	Being complied
iv	Approach road shall be made pucca to minimise generation of suspended dust	Being complied
V	The Company shall make the arrangement for control of noise from the drilling activity. Acoustic enclosures to the DG sets and proper stack height shall be provided as per the CPCB guidelines.	DG sets are housed in the deck with acoustic enclosures. DG sets have adequate stack heights as per norms. People working near the sets are provided with ear muffs.
vi	Total fresh water requirement from ground water source shall not exceed20 m3/day/well and prior permission shall be obtained from the concerned authorities.	Fresh water requirement being met by tanker supply.
vii	The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated waste water shall confirm to CPCB standards.	Constructed the garland drains all around the drilling sites. Effluent water is being reused/re-cycled after treatment with mobile ETP.
Viii	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 as per the design approved by the CPCB and obtain authorisation from the SPCB. Copy of the authorisation or membership of TSDF shall be submitted to Ministry's Regional Office at Bangalore.	Drilling waste water and drill cuttings wash water are collected in HDPE lined waste pit and left for solar evaporation.
ix	Good sanitation facility shall be provided at the drill site. Domestic sewage shall be disposed-off through septic tank/ soak pit.	Being complied
х	Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/contamination, action plan shall be prepared to clean the site by adapting proven technology. The recyclable waste (oil sludge) and spent oil shall be disposed of to the authorised recyclers.	Spent oil disposed of to the authorised recyclers.
хi	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 <sup>th</sup> August, 2005.	Compliance details are given in the GSR 546(E) compliance table below.

xii	The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.	First aid, Fire fighting equipment provided as per OISD-189. Flaring is done through flare stack during testing for brief period only (1-2 days).
xiii	The Company shall develop a contingency plan for H2S release including all necessary aspects from evacuation to resumption of normal operations. The workers should be provided with personal H2S detectors in locations of high risk of exposure along with self-containing breathing apparatus.	No H <sub>2</sub> S is expected in the field. Portable H <sub>2</sub> S gas detectors are provided for monitoring.
xiv	The company shall carry out long term subsidence study by collecting baseline data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and its Regional Office at Bangalore.	Land subsidence study is being undertaken by Delta studies institute, Andhra University. Copy of the 1st Interim report was sent to your office.
xv	Blow Out Preventer (BOP) system shall be installed to prevent well blowouts during drilling operations,. Blow Out Prevention measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging, etc.	BOP's are installed.
xvi	Emergency Response Plan (ERP) shall be based on the guidelines prepared by OISD, DGMS and Govt. of India.	ONGC ERP is in accordance with the guidelines of OISD, DGMS and Govt. of India.
xvii	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 implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations. On completion of drilling, the company have to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority.	Dry wells are abandoned with plugs as per OMR-84
xviii	Occupational health surveillance of the workers shall be carried out as per the prevailing Acts and Rules.	Periodic medical examination (PME) is done as per norms in authorized hospitals.
xix	Drill site shall be at least 500m away from the school.	Noted for compliance.
xx	In case commercial viability of the project is established, the company shall prepare a detailed plan for development of oil and gas fields for the above block and obtain fresh clearance from the Ministry.  Restoration of the project site shall be carried out	In case commercial viability established company will prepare and development plan and apply for fresh clearance from the Ministry.  Being complied
xxi	satisfactorily and report shall be sent to the Ministry's Regional Office at Bangalore.	ū .
xxii	Oil content in the drill cuttings shall be monitored by some authorised agency and report shall be sent to the Ministry's Regional Office at Bangalore.	Oil content in the drill cuttings is being monitored by authorised agency.
xxiii	Under corporate social responsibility (CSR), sufficient provision shall be made for health improvement, education, water and electricity supply etc. in and around the project.	ONGC providing adequate funds under CSR scheme.
xxiv	All personal including those of contractors shall be trained and made fully aware of the hazards, risks and controls in place.	All persons working at the drill site including those of contractors are being imparted with Mines Vocational Training (MVP) as per the guidelines of DGMS.

		Luce a diameter
XXV	Company shall have own Environment Management Cell having qualified persons with proper background.	HSE setup is functional in the company to carry out these functions.
xxvi	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the drill site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.	MOEF approved EIA reports are available. Environmental protection measures suggested in the report are being adhered.
B. Gei	neral Conditions:	
i	The project authorities must strictly adhere to the stipulations made by Andhra Pradesh State Pollution Control Board (APPCB), State Government and any other statutory authority.	The observations raised by the statutory authorities like APPCB, DGMS, OISD are compiled as and when raised
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. In case of deviations or alternations 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.	Drilling activities are conducted as per the approval received from MoEF.
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, storage and import of hazardous chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc., must be obtained, wherever applicable.	Drilling operations are carried out as per DGMS OMR-84 and OISD standards. Handling of explosives approval is obtained from Chief Controller of Explosives.
iv	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 (day time) and 70 dBA (night time).	Acoustic enclosures are provided for the gen sets to minimise the noise levels with in specified limits. Ear muffs provided for the persons working near the gensets. The ambient noise levels are being monitored regularly.
V	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	HSE setup is functional in the company to carry out these functions
Vi	A copy of the clearance letter shall be sent by the proponent to the concerned panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the local NGO, if any from whom suggestions/representations, if any, were received while processing the proposal. The clearance shall also be put on the web site of the company by the proponent.	Being complied

vii	The project proponent shall upload the status of compliance of stipulated environment clearance conditions, including the results of the monitored data on their web site and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & non methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Being complied
viii	The project proponent shall also submit six monthly compliance reports on the status of the compliance of the stipulated environmental conditions including the results of the monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective zonal of CPCB and the APPCB. The Regional Office of this Ministry/CPCB/ RSPCB shall monitor the stipulated conditions. Environmental clearance and six monthly compliance status reports shall be posted on the website of the company.	Being complied.
ix	The environmental statement for each financial year ending 31st March in the form-V is mandated to be submitted by the project proponent to the concerned state pollution control board as prescribed under the Environment (protection) Rules 1986 as amended subsequently, shall also be put on the web site of the company along with the status of compliance of environmental conditions and shall also be sent to the respective regional offices of the MOEF by email.	Exploratory drilling activity is of short duration for 3 to 4 months at particular site.
х	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the APPCB and may also be seen at Website of the Ministry and Forests at http://www.envfor.nic.in. This shall be advertised within seven days of the issue of this letter at least two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office.	Company policy and other relevant information being displayed in front of each locations. Details of the environmental clearance are published in the local newspapers.
xi	The Project Authorities shall 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.	All the project details are provided to the statutory authorities.

## GSR 546(E) dt. $30^{\text{th}}$ August, 2005. Disposal of Drill Cutting and Drilling Fluids for On-shore Installations:

а	Drill Cuttings (DC) originating from on-shore or locations close to shore line and separated from Water Base Mud (WBM) should be properly washed and unusable drilling fluids (DF) such as WBM, Oil Base Mud (OBM), and Synthetic Base Mud (SBM) should be disposed off in a well-designed pit lined with impervious liner located off-site or on-site. The disposal pit should be provided additionally with leachate collection system. Design aspects of the impervious waste disposal pit; capping of disposal pit should be informed by the oil industry to State Pollution Control Board (SPCB) at the time of obtaining consent.	Only WBM used. Mud is recycled and reused. Cuttings and un used mud is washed and collected in impervious HDFE lined pit in the drill site designed as per specifications.
b	Use of diesel base mud is prohibited. Only WBM should be used for on-shore oil drilling operations.	Only water based mud is used
С	In case of any problem due to geological formation for drilling, low toxicity OBM having aromatic content< 1% should be used. If the operators intend to use such OBM to mitigate specific hole problem/ SBM it should be intimated to Ministry of Environment and Forests/State Pollution Control Board.	Only water based is used. In case of specific down hole problem SOBM is being used with intimation to the MoEF.
d	The chemical additives used for the preparation of DF should have low toxicity i.e. 96 hr. LC50 > 30,000 mg/l as per mysid toxicity or toxicity test conducted on locally available sensitive sea species. The chemicals used (mainly organic constituents) should be biodegradable.	All additives used in the mud are having 96 hrs. LC <sub>50</sub> value > 30000 mg/l.
е	DC separated from OBM after washing should have oil content at < 10 gm/kg for disposal into disposal pit.	Water based mud is used, DC's after washing have very low (<10gm/kg) oil content
f	The waste pit after it is filled up shall be covered with impervious liner, over which, a thick layer of native soil with proper top slope is provided.	After evaporation waste pit is covered with thick layer of native soil.
g	Low toxicity OBM should be made available at installation during drilling operation.	SOBM is used in place of OBM in case of down hole problems
h	Drilling wastewater including DC wash water should be collected in the disposal pit evaporated or treated and should comply with the notified standards for on- shore disposal.	Complied
i	Barite used in preparation of DF shall not contain Hg> 1 mg/kg & Cd> 3mg/kg.	Barites used contains Cd<3mg/l and Hg<1mg/l (Copy of the test reports enclosed)
j	Total material acquired for preparation of drill site must be restored after completion of drilling operation leaving no waste material at site. SPCB should be informed about the restoration work.	After completion of drilling all the material is removed from the site and site is restored back.
k	In case, environmentally acceptable methods for disposal of drill waste such as (a) injection to a formation through casing annuals, if conditions allow (b) land farming at suitable location (c) bio-remediation (d) incineration or (e) solidification can be considered, in such cases oil industry is required to submit proposal to Ministry of Environment and Forests/State Pollution Control Board (MoEF/SPCB) for approval.	Noted for compliance.

Period: 1<sup>st</sup> April' to 30<sup>th</sup> to September' 2015. Well Nos: NASG-1 Basin: KG-PG Basin.

Block: KG-OSN-2004/1.

EC No: F.No. J-11011/541/2007-IA II (I) dated 23<sup>rd</sup> July, 2014.

i	A. Specific conditions: Only high efficiency DG set with adequate stack height and modern emission control equipment and low sulphur clean diesel shall be used. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	DG sets are provided as per MoEF and CPCB guidelines using low sulphur clean diesel with acoustic enclosures
ii	Gas produced during testing shall be flared with appropriate flaring booms.	Flare booms are provided for flaring gas during testing as per OISD guidelines
iii	The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.	Flare booms are provided for flaring gas during testing as per OISD guidelines. All OISD/CPCB/MoEF guidelines followed
iv	Total water requirement shall not exceed 30 m3/day/well and prior permission shall be obtained from the Competent Authority for the drawl of water. Only water based mud system shall be used.	Complied.
V	Water based drilling mud (WBM) shall be discharged to the sea after proper dilution as per E(P) Rules vide G.S.R 546(E) dated 30th August, 2005.	Water based mud and drill cuttings are disposed to sea after thorough wash and @50 bbls /hr intermittently as notified vide GSR 546(E).
vi	The Company shall ensure that there shall be no impact on flora fauna due to drilling of wells in the offshore sea. The company shall undertake conservation measures to protect the marine animals/biota in the region. The company shall monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.	Non-toxic muds are used for drilling. Hence there will be no long term impact on marine biota. Yearly East coast marine environment monitoring is being done by ONGC. Monitoring Report for the year 2014-15 is enclosed.
vii	Treated wastewater (produced water or formation water) shall comply with the marine disposal standards notified under the Environment (Protection) Act, 1986. Sewage treatment on board of the rig as per MARPOL regulation. Residual chlorine shall not exceed 1 mg/l before disposal.	Being the exploratory drilling only small quantity of produced water is generated during testing for brief period which will be treated and discharged as per standards. Sewage is treated in on board STP and discharged after complying MARPOL standards.
viii	The drill cutting (DC) wash water shall be treated to conform to limits notified under the Environment (Protection) Act, 1986, before disposal into sea. The treated effluent shall be monitored regularly.	Drill cuttings and wash water is disposed to sea after diluting at the rate 50 bbls/hr intermittently
ix	All the guidelines shall be followed for the disposal of solid waste, drill cutting and drilling fluids for onshore and offshore drilling operation notified vide GSR.546(E) dated 30th August, 2005. Different types of wastes shall be kept segregated.	Water based mud Drill cuttings are disposed to sea after thorough wash and @50 bbls /hr intermittently as notified vide GSR546(E). Solids waste are segregated and sent to base for safe disposal.
х	High efficiency equipment shall be used to separate solids, hydrocarbons and water such as shale shakers with improved capacity to filter smaller solids, low shear pumps for use in produced water shall be employed.	High efficiency solid control equipment (shale shaker, desander, desilter) are provided on the rig

xi	Good book keeping practices shall be put in place to manage wastes such as waste tracking program i.e. identify where and when the waste generated, the type of waste and its volume, the disposal method and its location, and the personnel responsible for the waste management.	QHSE Management system is in place and all the waste records are maintained and kept on the rig.
xii	A waste minimisation plan shall be developed and followed through proper inventory management following best practices in drilling operations, good housekeeping practices and optimised equipment maintenance schedules.	Waste minimization and good maintenance practices are followed.
xiii	Only essential rig personnel shall be on board the rig. Emergency Response Plan and health, safety and environment (HSE) system shall be installed. Geo- hazard and geotechnical studies shall be carried out to ensure safe drilling operations.	ERP & HSE systems are in place and geo technical studies have been carried out before rig deployment
xiv	All the hazardous waste generated at the rig/offshore facility shall be properly treated, transported to on shore and disposed of in accordance with the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules 2008. No waste oil shall be disposed of into sea. Waste/used oil shall be brought on-shore and sold to MoEF/CPCB authorized recyclers/re processors only.	Spent oil and used batteries are sent to central stores at on shore base for disposal to authorized recyclers.
xv	Requisite infrastructure facilities shall be provided near the offshore installations so that booms and skimmers/chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts shall be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick within 500 meters shall be provided.	Oil spill Contingency plan and Infrastructure is available to contain oil slick within 500 mts.
xvi	Approval from DG Shipping under the Merchant Shipping Act prior to commencement of the drilling operations shall be obtained. At least 30 days prior to the commencement of drilling, the exact location shall be intimated to the Director General of Shipping and the Company shall abide by any direction he may issue regarding ensuring the safety of navigation in the area.	Necessary approvals from the authorities obtained prior to drilling
xvii	The International 'Good Practices' adopted by the Petroleum Industry viz International norms to safeguard the coastal and marine biodiversity shall be implemented by the company.	International good practices are followed during drilling operations
Xviii	The Company shall take necessary measures to reduce noise levels such as proper casing at the drill site and meet DG set norms notified by the MoEF. Height of all the stacks/vents shall be provided as per the CPCB guidelines.	DG sets are housed in the deck with acoustic enclosures. People working near the sets are provided with ear muffs.
xix	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.	It is exploratory drilling no transportation of oil and gas will be carried out
xx	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA /EMP/RA/NIO report.	All environmental protection measures recommended in the EIA are being followed
xxi	Full drawings and details of Blow Out Preventer to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry's Regional Office within 3 months of the issue of environment clearance.	BOP drawings submitted to the OISD

xxii	On completion of activities, the well shall be either plugged and suspended (if the well evaluation indicates commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well. The position at the end of the activities shall be communicated in detail to the Ministry indicating the steps taken i.e. whether all the wells are plugged or abandoned and necessary precautions taken.	All the OISD guidelines for well plugging followed
Xxiii	A brief report on environmental status & safety related information generated and measures taken as well as frequency of such reporting to the higher Authority shall be submitted to this Ministry and its respective Regional Office at Bangalore.	Compliance report submitted to the Regional Office MoEF, Chennai
xxiv	Petroleum and Natural Gas (Safety in Offshore Operations) Rules 2008 of OISD should be strictly adhered to.	All P&NG rules followed.
Xxv	Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be followed.	All the recommendations mentioned in the RAC and DMP are being followed
xxvi	Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Organisation has earmarked adequate funds for environment management.
xxvii	Petroleum and Natural Gas (safety in Offshore Operations) Rules 2008 of OISD shall be strictly adhered to.	All P&NG rules followed.

I	B. General conditions: The project authorities must strictly adhere to the stipulations made by the A.P. Pollution Control Board (APPCB), State Government and any other statutory authority.	It is the offshore exploratory drilling. All the stipulations of MoEF are followed
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. 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.	Noted for compliance and modifications and expansion will be intimated to the Ministry
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Drilling operations are carried out as per OISD standards. Spent oil and used batteries are sent to central stores at on shore base for disposal to authorized recyclers. Handling of explosives approval is obtained from Chief Controller of Explosives.
iv	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 (night time).	DG sets are housed in the deck with acoustic enclosures. People working near the sets are provided with ear muffs.
V	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	HSE setup is functional in the company to carry out these functions

	A copy of clearance letter shall be sent by the proponent to	Environmental compliance details
vi	concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	are published in newspapers and available in the MoEF site.
vii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Being complied
viii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the APPCB. The Regional Office of this Ministry / CPCB / APPCB shall monitor the stipulated conditions.	Six monthly environmental compliance reports are sent to Regional office of MoEF, Chennai regularly
ix	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Offshore exploratory drilling is carried out only for 2-3 months.
x	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the APPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall 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 a copy of the same shall be forwarded to the Regional office.	Published in the news papers
xi	Project authorities shall 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.	Shall be intimated

Period: 1<sup>st</sup> April to 31<sup>st</sup> September' 2015. Well No: M-5, F-1 and A2-1 Basin: KG-PG Basin.

Block: KG-DWN-98/2.

EC No: F.No. J-11011/189/2013-IA II (I) dated 24th January'2014.

i	A. Specific conditions: Only high efficiency DG set with adequate stack height and modern emission control equipment and low sulphur clean diesel shall be used. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	DG sets are provided as per MoEF and CPCB guidelines using low sulphur clean diesel with acoustic enclosures
ii	Gas produced during testing shall be flared with appropriate flaring booms.	Flare booms are provided for flaring gas during testing as per OISD guidelines
iii	The flare system shall be designed as per good oil field practices and Oil Industry Safety Directorate (OISD) guidelines. The stack height shall be provided as per the regulatory requirements and emissions from stacks will meet the MOEF/CPCB guidelines.	Flare booms are provided for flaring gas during testing as per OISD guidelines. All OISD/CPCB/MoEF guidelines followed
iv	Total water requirement shall not exceed 35m3/day and prior permission shall be obtained from the Competent Authority for the drawl of water. Only water based mud system shall be used.	Complied
V	Water based drilling mud shall be discharged to the sea after proper dilution as per E(P) Rules vide G.S.R 546(E) dated 30th August, 2005.	Water based mud and drill cuttings are disposed to sea after thorough wash and @50 bbls /hr intermittently as notified vide GSR 546(E).
vi	The Company shall ensure that there shall be no impact on flora fauna due to drilling of wells in the offshore sea. The company shall undertake conservation measures to protect the marine animals/biota in the region. The company shall monitor the petroleum hydrocarbons and heavy metals concentration in the marine fish species regularly and submit report to the Ministry.	Non-toxic muds are used for drilling. Hence there will be no long term impact on marine biota. Yearly East coast marine environment monitoring is being done by ONGC. Monitoring Report for the year 2014-15 is enclosed.
vii	Treated wastewater (produced water or formation water) shall comply with the marine disposal standards notified under the Environment (Protection) Act, 1986. Sewage treatment on board of the rig as per MARPOL regulation. Residual chlorine shall not exceed 1 mg/l before disposal.	Being the exploratory drilling only small quantity of produced water is generated during testing for brief period which will be treated and discharged as per standards. Sewage is treated in on board STP and discharged after complying MARPOL standards.
viii	The drill cutting (DC) wash water shall be treated to conform to limits notified under the Environment (Protection) Act, 1986, before disposal into sea. The treated effluent shall be monitored regularly.	Drill cuttings and wash water is disposed to sea after diluting at the rate 50 bbls/hr intermittently
ix	All the guidelines shall be followed for the disposal of solid waste, drill cutting and drilling fluids for onshore and offshore drilling operation notified vide GSR.546(E) dated 30th August, 2005. Different types of wastes shall be kept segregated.	Water based mud Drill cuttings are disposed to sea after thorough wash and @50 bbls /hr intermittently as notified vide GSR546(E). Solids waste are segregated and sent to base for safe disposal.

х	High efficiency equipment shall be used to separate solids, hydrocarbons and water such as shale shakers with improved capacity to filter smaller solids, low shear pumps for use in produced water shall be employed.	High efficiency solid control equipment (shale shaker, desander, desilter) are provided on the rig
xi	Good book keeping practices shall be put in place to manage wastes such as waste tracking program i.e. identify where and when the waste generated, the type of waste and its volume, the disposal method and its location, and the personnel responsible for the waste management.	QHSE Management system is in place and all the waste records are maintained and kept on the rig.
xii	A waste minimisation plan shall be developed and followed through proper inventory management following best practices in drilling operations, good housekeeping practices and optimised equipment maintenance schedules.	Waste minimization and good maintenance practices are followed.
xiii	Only essential rig personnel shall be on board the rig. Emergency Response Plan and health, safety and environment (HSE) system shall be installed. Geo- hazard and geotechnical studies shall be carried out to ensure safe drilling operations.	ERP & HSE systems are in place and geo technical studies have been carried out before rig deployment
xiv	All the hazardous waste generated at the rig/offshore facility shall be properly treated, transported to on shore and disposed of in accordance with the Hazardous Waste (Management, Handling and Trans boundary Movement) Rules 2008. No waste oil shall be disposed off into sea. Waste/used oil shall be brought on-shore and sold to MoEF/CPCB authorized recyclers/re processors only.	Spent oil and used batteries are sent to central stores at on shore base for disposal to authorized recyclers.
XV	Requisite infrastructure facilities shall be provided near the offshore installations so that booms and skimmers/chemical dispersants could be deployed immediately in case of oil leakage from the installations. Efforts shall be made to curtail the oil slick within 500 meters of the installation and accordingly, action plan and facilities to check the oil slick within 500 meters shall be provided.	Oil spill Contingency plan and Infrastructure is available to contain oil slick within 500 mts.
xvi	Approval from DG Shipping under the Merchant Shipping Act prior to commencement of the drilling operations shall be obtained. At least 30 days prior to the commencement of drilling, the exact location shall be intimated to the Director General of Shipping and the Company shall abide by any direction he may issue regarding ensuring the safety of navigation in the area.	Necessary approvals from the authorities obtained prior to drilling
xvii	The International 'Good Practices' adopted by the Petroleum Industry viz International norms to safeguard the coastal and marine biodiversity shall be implemented by the company.	International good practices are followed during drilling operations
xviii	The Company shall take necessary measures to reduce noise levels such as proper casing at the drill site and meet DG set norms notified by the MoEF. Height of all the stacks/vents shall be provided as per the CPCB guidelines.	DG sets are housed in the deck with acoustic enclosures. People working near the sets are provided with ear muffs.
xix	The design, material of construction, assembly, inspection, testing and safety aspects of operation and maintenance of pipeline and transporting the natural gas/oil shall be governed by ASME/ANSI B 31.8/B31.4 and OISD standard 141.	It is exploratory drilling no transportation of oil and gas will be carried out
xx	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA /EMP/RA/NIO report.	All environmental protection measures recommended in the EIA are being followed
xxi	Full drawings and details of Blow Out preventers to encounter well kick due to high formation presence, if encountered, shall be submitted to the Ministry within 3 months of the issue of environment clearance.	BOP drawings submitted to the OISD

xxii	On completion of activities, the well shall be either plugged and suspended (if the well evaluation indicates commercial quantities of hydrocarbon) or killed and permanently abandoned with mechanical plugs and well cap. If well is suspended, it shall be filled with a brine solution containing small quantities of inhibitors to protect the well. The position at the end of the activities shall be communicated in detail to the Ministry indicating the steps taken i.e. whether all the wells are plugged or abandoned and necessary precautions taken.	All the OISD guidelines for well plugging followed
xxiii	A brief report on environmental status & safety related information generated and measures taken as well as frequency of such reporting to the higher Authority shall be submitted to this Ministry and its respective Regional Office at Bangalore.	Compliance report submitted to the Regional Office MoEF, Bangalore
xxiv	Petroleum and Natural Gas (Safety in Offshore Operations) Rules 2008 of OISD should be strictly adhered to.	All P&NG rules followed.
xxv	Recommendations mentioned in the Risk Assessment & Consequence Analysis and Disaster Management Plan shall be followed.	All the recommendations mentioned in the RAC and DMP are being followed
xxvi	Adequate funds both recurring and non-recurring shall be earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.	Organisation has earmarked adequate funds for environment management.

i	B. General conditions: The project authorities must strictly adhere to the stipulations made by the A.P. Pollution Control Board (APPCB), State Government and any other statutory authority.	It is the offshore exploratory drilling. All the stipulations of MoEF are followed
ii	No further expansion or modification in the project shall be carried out without prior approval of the Ministry of Environment & Forests. 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.	Noted for compliance and modifications and expansion will be intimated to the Ministry
iii	The project authorities must strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000 as amended subsequently. Prior approvals from Chief Inspectorate of Factories, Chief Controller of Explosives, Fire Safety Inspectorate etc. must be obtained, wherever applicable.	Drilling operations are carried out as per OISD standards. Spent oil and used batteries are sent to central stores at on shore base for disposal to authorized recyclers. Handling of explosives approval is obtained from Chief Controller of Explosives.
iv	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 (night time).	DG sets are housed in the deck with acoustic enclosures. People working near the sets are provided with ear muffs.
V	A separate Environmental Management Cell equipped with full-fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.	HSE setup is functional in the company to carry out these functions

	A copy of clearance letter shall be sent by the proponent to	Environmental compliance details
	concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any,	are published in newspapers and available in the MoEF site.
vi	from whom suggestions / representations, if any, were received while processing the proposal. The clearance	
	letter shall also be put on the web site of the company by	
	the proponent.	
vii	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the APPCB. The criteria pollutant levels namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , HC (Methane & Non-methane), VOCs (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the projects shall be monitored and displayed	Being complied
	at a convenient location near the main gate of the company in the public domain.	
Viii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the APPCB. The Regional Office of this Ministry	Six monthly environmental compliance reports are sent to Regional office of MoEF, Chennai regularly
	/ CPCB / APPCB shall monitor the stipulated conditions.	
ix	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Offices of the MOEF by e-mail.	Offshore exploratory drilling is carried out only for 2-3 months
x	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the APPCB and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall 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 a copy of the same shall be forwarded to the Regional office.	Published in the news papers
xi	Project authorities shall 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.	Shall be intimated

## GSR 546(E) dt. 30<sup>th</sup> August, 2005. Disposal of Drill Cuttings and Drilling Fluids for Off-shore Installations:

А	Use of diesel base mud is prohibited. Only WBM is permitted for off shore drilling. If the operator intend to use low toxicity OBM or SBM to mitigate specific hole problems in the formation, it should be intimated to MoEF/SPCB. The low toxicity OBM should have aromatic content < 1%.	Complied
b	The toxicity of chemical additives used in the DF (WBM or OBM or SBM (mainly organic constituents) should be biodegradable and should have toxicity of 96 hr LC <sub>50</sub> value > 30,000 mg/l as per mysid toxicity or toxicity test conducted on locally available sensitive sea species.	Only water based mud is used with toxicity of 96 hr LC50 >30000 mg/l. All the organic constituent additives used in the mud are biodegradable.
С	Hexavalent chromium compound should not be used in DF. Alternative chemical in place of chrome lignosulphate should be used in DF. In case chrome compound is used, the DF/DC should not be disposed offshore.	Complied (No hexavalent Chromium compounds are used in the drilling fluid.)
d	Bulk discharge of DF in offshore is prohibited except in emergency situations.	Water based mud are disposed to sea after dilution and @50 bbls /hr intermittently as notified vide GSR546(E).
е	WBM/OBM/SBM should be recycled to a maximum extent. Unusable portion of OBM should not be discharged in to sea and shall be brought to on-shore for treatment & disposal in an impervious waste disposal pit.	Complied
f	Thoroughly washed DC separated from WBM/SBM & unusable portion of WBM/SBM having toxicity of 96 hr LC <sub>50</sub> value > 30,000 mg/l shall be discharged off-shore in to sea intermittently at an average rate of 50 bbl/hr/well from a platform so as to have proper dilution & dispersion without any adverse impact on marine environment.	Water based mud and Drill cuttings are disposed to sea after dilution and thorough wash @50 bbls /hr intermittently as notified vide GSR546(E).
g	Drill cuttings of any composition should not be discharged in sensitive areas notified by the Ministry of Environment and Forests.	Complied
h	In case of specific hole problem, use of OBM will be restricted with zero discharge of DC. Zero discharge would include re-injection of the DC in to a suitable formation or to bring to shore for proper disposal. In such a case, use of OBM for re-injection should be recorded and made available to the regulatory agency. Such low toxic OBM having aromatic content < 1% should be made available at the installation.	Complied
i	In case DC is associated with high oil content from hydrocarbon bearing formation, then disposal of DC should not have oil content >10 gm/kg.	Disposed drill cuttings contains oil content < 10 gm/kg
j	The DC wash water should be treated to confirm limits notified under EPA, before disposal in to sea. The treated effluent should be monitored regularly.	Complied
k	Discharge of DC from the installation located within 5 km away from the shore should ensure that there is no adverse impact on marine Eco-system and on the shore. If, adverse impact is observed, then the industries have to bring the DC on-shore for disposal in an impervious waste disposal pit.	Drilling locations 5 km away from the coast
I	If any, environmental friendly technology emerges for substitution of DF and disposal technology, it may be brought to the notice of MoEF and regulatory agencies. If the operator desires to adopt such environment friendly technology a prior approval from Ministry of Environment and Forests is required.	Noted for compliance

m	Barite used in preparation of DF shall not contain Hg> 1 mg/kg & Cd> 3mg/kg.	Barite used in preparation of DF contain Hg<1 mg/kg & Cd< 3 mg/kg. Copy of the test reports enclosed
n	Oil drilling operators are required to record daily discharge of DC & DF to offshore and also to monitor daily the effluent quality, and submit the compliance report once in every six-month to Ministry of Environment and Forests.	Records are maintained at the rig. Six monthly compliance reports are sent to MoEF.