



**NAYARA**  
ENERGY

**Reference: Nayara CPP/ENV/32631/EC Compliance of 483 MW/2021/1026**  
20<sup>th</sup> May 2021

**To,**  
**Ministry of Environment Forests & Climate Change**  
Regional Office,  
Kendriya Paryavaran Bhavan,  
E-5, Area Colony,  
Ravi Shankar Nagar,  
Link Road No. 3  
Bhopal – 462016.

**Subject:** Environmental Clearance (EC) compliance report of M/s Nayara Energy Limited, Captive Power Plant 483 MW at Khambhalia, District - Devbhumi Dwarka, Gujarat, for period from 1<sup>st</sup> October 2020 to 31<sup>st</sup> March 2021.

**Reference:** 1) Clearance No. J-13012/130/2008-IA.II (T) dated 21st September 2011, renewed on 7th August 2018 & amended on 07th May 2020.

Dear Sir,

This has reference to the Environmental Clearance (EC) issued by Ministry of Environment, Forests & Climate Change, Government of India vide letter referred above. As per General Condition No. XVII of the Environmental Clearance, we hereby submit our six monthly compliance status report for the period 1<sup>st</sup> October 2020 to 31<sup>st</sup> March 2021 along with relevant Annexures for your kind perusal and record please.

Thanking you,

Yours truly,

**For, Nayara Energy Ltd. (CPP)**

**Authorized Signatory**

**Enclosure:** EC Compliance Report with annexures.

**Copy to:**

1. The Chairman, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, New-Delhi-110032.
2. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10 A, Gandhinagar-382010.
3. Regional Officer, Gujarat Pollution Control Board, Jamnagar

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**EC COMPLIANCE REPORT AS ON 31<sup>st</sup> March, 2021**

**Ref: MOEF clearance No. J-13012/130/2008-IA.II (T) dated 21<sup>st</sup> September 2011, renewed on 7<sup>th</sup> August 2018  
& amended on 07<sup>th</sup> May 2020**

**Compliance Report for 483 MW Environment Clearance, period from 1<sup>st</sup> October 2020 to 31<sup>st</sup> March 2021**

Sr. No.	SPECIFIC CONDITIONS	compliance status
I.	Approval/clearance from the National Board of Wildlife shall be obtained. Further, grant of environmental clearance does not necessarily imply that wildlife clearance shall be granted to the project and the proposal shall be considered by the National Board of Wildlife on merits. The investment made in the project, if any, based on environmental clearance so granted, in anticipation of clearance from the wildlife angle shall be entirely at the cost and the risk of the company and MoEF in this regard shall not be responsible in any matter.	<p>As per the letter received from Chief Conservator of Forest &amp; Director of Marine National Park, Jamnagar, NAYARA ENERGY LTD. (CPP) has already applied for clearance. Also Nayara Energy Ltd. (CPP) is 8 km away from Marine National Park (MNP), Marine National Sanctuary (MNS) thus it is not covered under Eco Sensitive Zone (ESZ).</p> <p>The letter &amp; its translation are attached here as <b><u>Annexure – 1.</u></b></p>
II.	Environmental clearance is subject to final order of Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ petition (civil) no. 460 of 2004, as may be applicable to this project.	<p>As per the letter received from Chief Conservator of Forest &amp; Director of Marine National Park, Jamnagar, NAYARA ENERGY LTD. (CPP) has already applied for clearance. Also NAYARA ENERGY LTD. (CPP) is 8 km away from Marine National Park (MNP), Marine National Sanctuary (MNS) thus it is not covered under Eco Sensitive Zone (ESZ).</p> <p>The letter &amp; its translation are attached here as <b><u>Annexure – 1.</u></b></p>

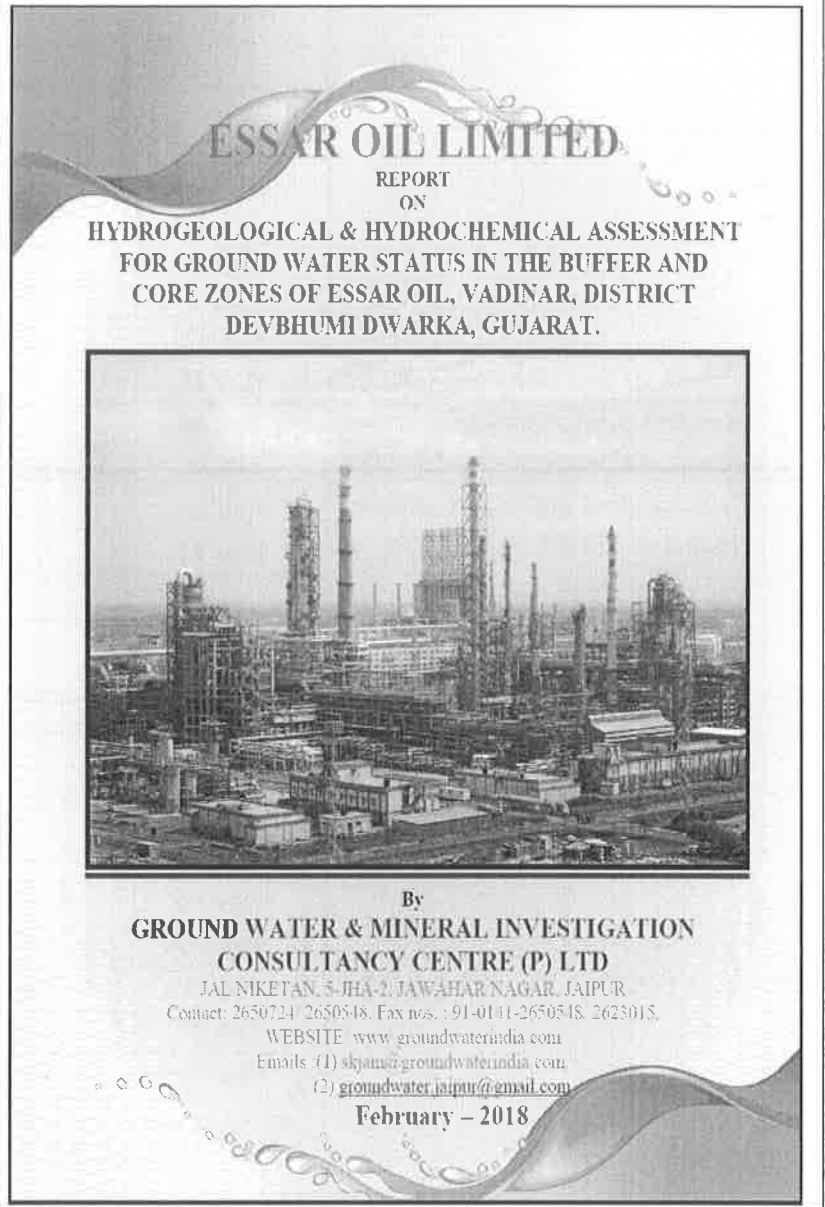
III.	A comprehensive conservation plan for protection and preservation of the Marine National Park prepared and vetted by the Competent Authority shall be implemented first in consultation before construction work for the plant is initiated.	<p>As per the below documentary proof, NAYARA ENERGY LTD. (CPP) is located 8 km away from the MNP, MNS &amp; ESZ. Hence the condition is not applicable to NAYARA ENERGY LTD. (CPP).</p> <p>Letter from Chief Conservator of Forest &amp; Director of Marine National Park, Jamnagar, mentioning the distance of 8 km from MNP/MNS &amp; ESZ is enclosed herewith as <b>Annexure – 1</b>.</p>																												
IV.	Conservation plan of Mangroves as stipulated while clearance of the construction of Jetty shall be first implemented before starting construction activity.	<p>Coal for NAYARA ENERGY LTD. (CPP) is brought via Bedi port of Gujarat Maritime Board &amp; Salaya port of M/s EBTSL.</p> <p>NAYARA ENERGY LTD. (CPP) is not having any captive Jetty, hence the given condition is not applicable to NAYARA ENERGY LTD. (CPP).</p>																												
V.	Vision document specifying prospective plan for the site shall be formulated and submitted to the ministry within six months.	The vision document has been provided to ministry along with the letter no. NAYARA ENERGY LTD. (CPP)/ENV/EC Compliance/2013 / 386 dated 27.06.2013.																												
VI.	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time, fresh reference shall be made to MOEF for suitable amendments to environmental clearance condition wherever necessary.	<p>Sulphur and ash contents in the coal is not exceeding 0.5% &amp; 34% respectively at any given time.</p> <p>In below table ash content &amp; sulphur content of coal shipment listed.</p> <table border="1" data-bbox="643 1328 1449 1686"> <thead> <tr> <th>Sr. No.</th> <th>Coal Shipment</th> <th>Ash Content (%)</th> <th>Sulphur Content (%)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MV Centaurus Dream</td> <td>5.63</td> <td>0.39</td> </tr> <tr> <td>2</td> <td>MV Southern Cross Dream</td> <td>5.06</td> <td>0.10</td> </tr> <tr> <td>3</td> <td>MV Aquavictory</td> <td>6.78</td> <td>0.29</td> </tr> <tr> <td>4</td> <td>MV Navios Bonheur</td> <td>4.77</td> <td>0.15</td> </tr> <tr> <td>5</td> <td>MV Great Century</td> <td>4.87</td> <td>0.11</td> </tr> <tr> <td></td> <td><b>Average</b></td> <td><b>5.42</b></td> <td><b>0.21</b></td> </tr> </tbody> </table>	Sr. No.	Coal Shipment	Ash Content (%)	Sulphur Content (%)	1	MV Centaurus Dream	5.63	0.39	2	MV Southern Cross Dream	5.06	0.10	3	MV Aquavictory	6.78	0.29	4	MV Navios Bonheur	4.77	0.15	5	MV Great Century	4.87	0.11		<b>Average</b>	<b>5.42</b>	<b>0.21</b>
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<p>VII.</p>	<p>A stack of 220 m height shall be provided with continuous online monitoring equipments for SO<sub>x</sub>, NO<sub>x</sub> and Particulate Matter (PM<sub>2.5</sub> &amp; PM<sub>10</sub>). Exit velocity of flue gases shall not be less than 22 m/sec. Mercury emissions from stack shall also be monitored on periodic basis.</p>	<p>A stack of 220 m height is provided with continuous online monitoring equipments.</p> <p>The results of monitoring reports for the parameters mentioned are provided below in tabular format with comparison to permissible limits prescribed in CC&amp;A issued by GPCB.</p> <table border="1" data-bbox="639 504 1417 987"> <thead> <tr> <th><u>Boiler 4</u></th> <th>Particulate Matter (PM)</th> <th>Sulphur Dioxide (SO<sub>2</sub>)</th> <th>Oxides of Nitrogen (NO<sub>x</sub>)</th> </tr> </thead> <tbody> <tr> <td><b>CC&amp;A Limit</b></td> <td>50 mg/Nm<sup>3</sup></td> <td>600 mg/Nm<sup>3</sup></td> <td>300 mg/Nm<sup>3</sup></td> </tr> <tr> <td><b>Oct'20</b></td> <td>27</td> <td>95</td> <td>211</td> </tr> <tr> <td><b>Nov'20</b></td> <td>13</td> <td>421</td> <td>140</td> </tr> <tr> <td><b>Dec'20</b></td> <td>21</td> <td>409</td> <td>204</td> </tr> <tr> <td><b>Jan'21</b></td> <td>22</td> <td>497</td> <td>206</td> </tr> <tr> <td><b>Feb'21</b></td> <td>25</td> <td>572</td> <td>241</td> </tr> <tr> <td><b>Mar'21</b></td> <td>5</td> <td>313</td> <td>139</td> </tr> </tbody> </table> <table border="1" data-bbox="639 1025 1417 1509"> <thead> <tr> <th><u>Boiler 5</u></th> <th>Particulate Matter (PM)</th> <th>Sulphur Dioxide (SO<sub>2</sub>)</th> <th>Oxides of Nitrogen (NO<sub>x</sub>)</th> </tr> </thead> <tbody> <tr> <td><b>CC&amp;A Limit</b></td> <td>50 mg/Nm<sup>3</sup></td> <td>600 mg/Nm<sup>3</sup></td> <td>300 mg/Nm<sup>3</sup></td> </tr> <tr> <td><b>Oct'20</b></td> <td>17</td> <td>174</td> <td>165</td> </tr> <tr> <td><b>Nov'20</b></td> <td>15</td> <td>341</td> <td>119</td> </tr> <tr> <td><b>Dec'20</b></td> <td>13</td> <td>265</td> <td>183</td> </tr> <tr> <td><b>Jan'21</b></td> <td>19</td> <td>419</td> <td>171</td> </tr> <tr> <td><b>Feb'21</b></td> <td>18</td> <td>509</td> <td>179</td> </tr> <tr> <td><b>Mar'21</b></td> <td>10</td> <td>573</td> <td>127</td> </tr> <tr> <td><b>CC&amp;A Limit</b></td> <td><b>50</b></td> <td><b>600</b></td> <td><b>300</b></td> </tr> </tbody> </table> <p>All results are within prescribed limits.</p>	<u>Boiler 4</u>	Particulate Matter (PM)	Sulphur Dioxide (SO <sub>2</sub> )	Oxides of Nitrogen (NO <sub>x</sub> )	<b>CC&amp;A Limit</b>	50 mg/Nm <sup>3</sup>	600 mg/Nm <sup>3</sup>	300 mg/Nm <sup>3</sup>	<b>Oct'20</b>	27	95	211	<b>Nov'20</b>	13	421	140	<b>Dec'20</b>	21	409	204	<b>Jan'21</b>	22	497	206	<b>Feb'21</b>	25	572	241	<b>Mar'21</b>	5	313	139	<u>Boiler 5</u>	Particulate Matter (PM)	Sulphur Dioxide (SO <sub>2</sub> )	Oxides of Nitrogen (NO <sub>x</sub> )	<b>CC&amp;A Limit</b>	50 mg/Nm <sup>3</sup>	600 mg/Nm <sup>3</sup>	300 mg/Nm <sup>3</sup>	<b>Oct'20</b>	17	174	165	<b>Nov'20</b>	15	341	119	<b>Dec'20</b>	13	265	183	<b>Jan'21</b>	19	419	171	<b>Feb'21</b>	18	509	179	<b>Mar'21</b>	10	573	127	<b>CC&amp;A Limit</b>	<b>50</b>	<b>600</b>	<b>300</b>
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<p>VIII.</p>	<p>No ground water shall be extracted for use in operation of the power plant even in lean season.</p>	<p>No ground water is extracted for use in operation of the power plant. The source of water is sea water. DM water after desalination of sea water is supplied by M/s Nayara Energy Limited (Formerly known as Essar Oil Ltd.) and sea water is utilized as make up in cooling tower.</p>																																																																				

NAYARA ENERGY LTD. (CPP) has retained M/s Ground Water & Mineral Investigation Consultancy Centre (P) Ltd., Jaipur in 2017 for Hydrogeology study. The cover page of the report is as below.

IX.

Hydro geological study of the area shall be reviewed annually and report submitted to the Ministry. No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.



<p>X.</p>	<p>COC of 1.5 shall be adopted.</p>	<p>Complied with. NAYARA ENERGY LTD. (CPP) is maintaining COC as per the given condition. Monthly average, COC is tabulated below.</p> <table border="1" data-bbox="616 360 1331 680"> <thead> <tr> <th>Month</th> <th>Average COC</th> </tr> </thead> <tbody> <tr> <td>Oct'20</td> <td>1.29</td> </tr> <tr> <td>Nov'20</td> <td>1.33</td> </tr> <tr> <td>Dec'20</td> <td>1.23</td> </tr> <tr> <td>Jan'21</td> <td>1.30</td> </tr> <tr> <td>Feb'21</td> <td>1.29</td> </tr> <tr> <td>Mar'21</td> <td>1.28</td> </tr> <tr> <td><b>Average</b></td> <td><b>1.28</b></td> </tr> </tbody> </table>	Month	Average COC	Oct'20	1.29	Nov'20	1.33	Dec'20	1.23	Jan'21	1.30	Feb'21	1.29	Mar'21	1.28	<b>Average</b>	<b>1.28</b>
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<p>XI.</p>	<p>Guard pond shall be developed and cooling water drawdown shall be disposed at ambient temperature after adequate retention at the guard pond.</p>	<p>Cooling Tower blow down is discharged along with refinery reject streams through the existing return sea water pipeline of M/s Nayara Energy Ltd. (Formerly known as Essar Oil Ltd). Since the length of the pipeline up to the final discharge point is approximately 21 km provided with adequate diffuser, temperature drop takes place within the pipeline.</p>																
<p>XII.</p>	<p>Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself. The action taken report and details thereof to this effect shall be submitted to the Regional Office of the Ministry and the State Govt. Dept. concerned from time to time.</p>	<p>Local youth is being trained for technical skill required for plant operation and maintenance. These local trained people are appointed in plant.</p>																
<p>XIII.</p>	<p>Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.</p>	<p>Additional soil has been generated within the sites in such a way that the natural drainage system of the area is protected.</p>																

XIV.	Provision for installation of FGD shall be provided for future use.	Provision for installation of FGD has already been provided for future use. The copy of the plot plan drawing mentioning location of proposed FGD has been submitted with compliance report NAYARA ENERGY LTD. (CPP)/ENV/EC Compliance/32631/667, dated 25 <sup>th</sup> April, 2017.
XV.	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that Particulate Emission from the proposed plant and cement grinding unit (as applicable) does not exceed 50 mg/Nm <sup>3</sup> .	High efficiency ESPs have been installed to ensure that the particulate matter emission from the plant does not exceed 50 mg/Nm <sup>3</sup> .
XVI.	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	<p>Dust suppression system has been installed for transfer points of coal conveyer belt.</p> <p>Dust extraction system with Bag filter units are mounted on the top of ash silos and coal bunkers to filter exhaust air before leaving it to the atmosphere.</p> <p>Dust suppression &amp; extraction system schematic diagrams with drawings have been submitted with the compliance report NAYARA ENERGY LTD. (CPP)/ENV/EC Compliance/32631/667, dated 25<sup>th</sup> April, 2017.</p>
XVII.	Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	<p>Fly ash generated is dispatched directly from silos to cement manufacturers. NAYARA ENERGY LTD. (CPP) is utilizing low ash content coal, daily average generation of fly ash is 234 MT for FY 2020-21. There are 2 silos having total capacity of 1400 MT to store the fly ash, adequate to store fly ash for 5 to 6 days. From silos the fly ash is directly loaded in the fly ash bulkers of cement manufacturers on daily basis.</p> <p>We have submitted a compliance letter named NAYARA CPP/ENV/Fly ash/2021/32631/1021, dated 28<sup>th</sup> April 2021 to GPCB &amp; MoEF&amp;CC regarding disposal of fly ash. Please find enclosed ash disposal reports as <u>Annexure - 2</u>,</p>



<p>XVIII.</p>	<p>Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.</p>	<p>Fly ash generated is collected in dry form in silos from where it is collected in specially designed bulkers and sold directly to cement manufacturers on daily basis.</p> <p>NAYARA ENERGY LTD. (CPP) has 2 silos having total capacity of 1400 MT to store the fly ash, which is adequate to store fly ash for 5 to 6 days. NAYARA ENERGY LTD. (CPP) utilise coal having low ash content.</p> <p>Daily average generation of the Fly ash is 234 MT for the period from October'20 to March'21.</p> <p>Ash pond has been also built to meet emergency requirement &amp; no effluent is emanating from ash pond. Furthermore please find enclosed ash analysis reports as <u>Annexure -3</u>, which shows no detection of heavy metals in ash.</p> <p>No Ground water is extracted for use in power plant.</p> <p>Ground water quality monitoring in surrounding village is carried out six monthly and the copy of monitoring report is attached herewith as <u>Annexure – 4</u>.</p> <p>No ash is being disposed off in low lying area.</p>
<p>XIX.</p>	<p>Ash pond shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.</p>	<p>Ash pond has been lined with HDPE. Further Brick lining has also been provided as additional safety measures.</p>
<p>XX.</p>	<p>Old abandoned ash dyke (if any) shall be appropriately capped and rehabilitated so that no possible emission of fly ash takes place.</p>	<p>No old abandoned ash dyke is available on the site.</p>

XXI.	Grazing land of adequate area (and not less than the same area earlier acquired while land for the refinery was acquired) shall be developed and action plan shall be submitted to the Ministry within six months.	The Captive Power Plant site is located within the existing M/s Nayara Energy Limited (Formerly known as Essar Oil Ltd.) Land is already purchased by M/s Nayara Energy Ltd.
XXII.	Green Belt consisting of three tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 75 %.	M/s NAYARA ENERGY LTD. (CPP) is located within the M/s Nayara Energy Limited (Formerly known as Essar Oil Ltd.) premises. The green belt of the NAYARA ENERGY LTD. (CPP) is covered under the M/s Nayara Energy Limited green belt & M/s Nayara Energy Limited has developed green belt in 410 Ha of area.
XXIII.	The project proponent shall also adequately contribute in the development of the neighbouring villages. Special package with implementation schedule for free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	Captive Power Plant (CPP) of Nayara Energy Ltd. is committed to maintain the highest standards of CSR in its business activities and aims to make a difference to the communities around. Free potable water is being supply in the nearby villages. Details of funding for potable drinking water supply to nearby villages is attached herewith as <b><u>Annexure – 5.</u></b>

<p>XXIV.</p>	<p>An amount of Rs 16.0 Crores shall be earmarked as one time capital cost for CSR program. Subsequently a recurring expenditure of Rs 3.20 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.</p>	<p>M/s NAYARA ENERGY LTD. (CPP) is committed to maintain the highest standards of CSR in its business activities and aims to make a difference to the communities around.</p> <p>Amount of Total Rs. 1.20 Crores has been spent on CSR activities carried out during October'2020 to March'2021, sub-head wise break up is attached herewith as <b>Annexure – 5</b>.</p>
<p>XXV.</p>	<p>While identifying CSR program the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such program. Company shall provide separate budget for community development activities and income generating programs. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.</p>	<p>Company involves in social activity right from its inception in the field of education, health and livelihood also is very much concern about the local need for quality of life. All these activities lead to a cause for betterment of the life. Company has prepared long term vision and intervention plan for 12 nos. selected villages near the company area. Based on long term association with the community foundation felt that health, education, livelihood and environment are the key area of intervention.</p>

XXVI.	<p>It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time.</p>	<p>The annual social audit in terms of impact assessment of schemes/projects identified is listed below.</p> <ol style="list-style-type: none"> <li>1. Impact assessment of Community Health Project was done by Chetna – 2013.</li> <li>2. Impact assessment of Shishumangalam Project was done by Chetna – 2013.</li> <li>3. Community assessment and feedback report for BIAF-ESSAR Gram Vikas by BIAF &amp; AROHANA Eco social Developments Pvt Ltd. – 2015.</li> <li>4. Think Through Consultancy (TTC) has evaluate the CSR program – for FY 2015-16.</li> <li>5. Klynveld Peat Marwick Goerdeler (KPMG) has evaluate the CSR programs – for FY 2016-17.</li> <li>6. Think Through Consultancy (TTC) has evaluate the CSR program –for FY 2017-18.</li> <li>7. Deloitte has conducted an assessment of CSR program in 2018-19.</li> </ol>
Sr. No.	General Conditions:	Action Taken Report
I.	<p>The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.</p>	<p>Boiler blow-down is being utilized for cooling tower make up. Cooling Sea water is being used for Cooling water application. CTBD is discharged along with the reject effluent stream from Refinery through 21 kms. long sea water return line. Separate Storm water channel network is provided.</p>
II.	<p>A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.</p>	<p>Sewage Treatment plant is provided and all treated sewage is being used in green belt.</p>

<p>III.</p>	<p>A well designed rainwater harvesting shall be constructed. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of issue of clearance and details shall be furnished to the Regional Office of the Ministry.</p>	<p>As M/s NAYARA ENERGY LTD. (CPP) is situated within the M/s Nayara Energy Limited (Formerly known as Essar Oil Ltd.) premises, there is common rain water harvesting system in M/s Nayara Energy Limited as per catchment area identified. As recharge wells &amp; rain water harvesting pond is belong to M/s Nayara Energy Limited, considering this we have not submitted details to regional office.</p> <p>As per our existing practice, rain water from NAYARA ENERGY LTD. (CPP) is routed through storm water channels to Rainwater Harvesting Pond situated in M/s Nayara Energy Limited for storage &amp; recharging of ground water.</p>
<p>IV.</p>	<p>Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.</p>	<p>Coal from M/s Essar Bulk Terminals Salaya Ltd. supplied to M/s NAYARA ENERGY LTD. (CPP) through conveyor belt. Wherein all the safety measures have been implemented. No coal stock at site.</p>
<p>V.</p>	<p>Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.</p>	<p>Liquid Fuel (LDO, FO, LSHS) are used from the storage tank. All these storage tanks are licensed by Petroleum &amp; Explosives Safety Organization (PESO), Vadodara sub circle office.</p> <p>The sulphur content in the liquid fuel is less than 0.5%. Liquid fuel usage is very minimal for start-up of boiler only.</p> <p>Site specific Emergency Response Disaster Management Plan (ERDMP) is prepared, approved and implemented.</p>

<p>VI.</p>	<p>Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.</p>	<p>Fly ash generated from plant is sold directly from silos to cement manufacturers. As NAYARA ENERGY LTD. (CPP) is utilising low ash content coal, daily average generation of fly ash is 234 MT for the time period from October'20 to March'21. NAYARA ENERGY LTD. (CPP) has 2 silos having total capacity of 1400 MT to store the fly ash, which is adequate to store fly ash for 5 to 6 days. From silos the fly ash is directly loaded in the fly ash bulkers of cement manufacturers on daily basis.</p> <p>However Ash pond has been constructed for emergency purpose &amp; no effluent is emanating from ash pond. Furthermore please find enclosed ash analysis reports as <u>Annexure - 3</u>, which is showing no detection of heavy metals in ash.</p> <p>To ensure quality of ground water in surrounding village, six monthly sampling &amp; analysis is carried out. The copies of ground water monitoring reports carried out in last six months is attached here as <u>Annexure – 4</u>.</p>
<p>VII.</p>	<p>Monitoring surface water quantity and quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.</p>	<p>No surface water sources available at the project site.</p> <p>There is no extraction of ground water for use in Power Plant.</p>
<p>VIII.</p>	<p>First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.</p>	<p>First Aid and sanitation arrangements provided to the drivers &amp; contract workers.</p>

IX.	<p>Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.</p>	<p>Noise Monitoring is being carried out monthly in the surrounding of plant area, report of the same is in below table.</p>					
		<b>Locations</b>		<b>Noise Level, dB(A) during Day Time 06:00 am to 10:00 pm</b>		<b>Noise Level, dB(A) during Night Time 10:00 pm to 06:00 am</b>	
				<b>Min</b>	<b>Max</b>	<b>Min</b>	<b>Max</b>
		Ambient Station at Port A Camp		52.0	53.0	48.2	51.8
		Ambient Station at Labour Gate		52.4	53.2	50.2	52.2
		Ambient Station at West side of Main Flare		52.2	53.2	48.0	52.4
		Nr. Batching Plant		52.0	53.0	50.0	52.4
		Ambient Station at 93 Gate		51.8	52.4	49.4	51.8
		Storm water drain outlet		53.0	53.8	50.8	52.6
		Ambient Station at Refinery Main Gate		52.0	53.2	48.2	52.2
		Petrol Pump (Near Delhi Darbar)		53.4	54.6	50.6	53.2
		Ambient Station at Pet Coke Rail Loading Yard		52.2	53.2	49.2	52.6
<b>Ambient Air Quality standards in terms of Noise for industrial area</b>		<b>75 dB(A)</b>		<b>70 dB(A)</b>			
<p>PPE's are provided to ensure for eardrum protection of the employees, workers as well as visitors.</p> <p>Acoustic barriers or acoustic enclosures and silencers are provided for the high noise generating equipment.</p> <p>Sound proofing / glass paneling have been provided at critical operating stations / control rooms.</p> <p>Periodic Medical Examination of each employee conducted every year which includes audiometric tests as well.</p>							

IX.	<p>Regular monitoring of ground level concentration of SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>2.5</sub> &amp; PM<sub>10</sub> and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.</p>	<p>Manual monitoring for ambient air is carried out by third party on weekly basis and summary of the ambient air monitoring data is given in below table.</p>					
		Sr. no.	Parameters	Limit	Min	Max	Average
		1	PM <sub>10</sub> µg/m <sup>3</sup>	100 (TWA <sub>24</sub> Hrs)	62	96	83
		2	PM <sub>2.5</sub> µg/m <sup>3</sup>	60 (TWA 24 Hrs)	12	38	28
		3	Sulphur Dioxide (SO <sub>2</sub> ) µg/m <sup>3</sup>	80 (24 Hrs)	10	21	14
		4	Nitrogen Oxides (NO <sub>2</sub> ) µg/m <sup>3</sup>	80 (24 Hrs)	11	28	18
		5	Carbon Monoxide (CO) mg/m <sup>3</sup>	2 (TWA 8 Hrs)	<1	<1	<1
		6	Benzene µg/m <sup>3</sup>	5 (TWA Annual)	<1	<1	<1
7	Benzo(a) – Pyrene ng/m <sup>3</sup>	1 (TWA Annual)	<0.1	<0.1	<0.1		
		<p>Environmental monitoring reports are submitted to GPCB on monthly basis.</p>					



<p>X.</p>	<p>Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.</p>	<p>A well planned Labour Colony with all the basic amenities has been developed at site.</p>
<p>XI.</p>	<p>The project proponent shall advertise in at least two newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with State Pollution Control Board/ Committee and may also be seen at website of the Ministry of Environment and Forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a></p>	<p>Advertised in three local newspapers widely circulated in the region around the project on 27.09.2011 informing that the project has been accorded environment clearance.</p>

<p>XII.</p>	<p>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal corporation, urban local body and the local NGO, if any, from whom suggestions/ representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.</p>	<p>Environment Clearance copy was submitted to Gram Panchayat, local NGO &amp; Gujarat Pollution control Board, Jamnagar and also put on our website.</p>
<p>XIII.</p>	<p>An environmental cell shall be created at the project site itself and shall be headed by an officer of appropriate seniority and qualification. It shall be ensured that the head of the cell directly report to the head of the organization.</p>	<p>Environment Cell is created since inception of the company and headed by qualified person.</p>
<p>XV.</p>	<p>The proponent shall upload the status of compliance of the stipulated EC 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 MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 &amp; PM10), SO2, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>EC compliance report along with monitoring data is uploaded on company website and updated on half yearly basis.  Continuous stack emission and Continuous ambient air quality data is being displayed at main gate.</p>

<p>XVI.</p>	<p>The environment 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 clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.</p>	<p>Environment Statement Form-V for each financial year is being submitted to Gujarat Pollution Control Board and same has been uploaded on company website.</p> <p>Form V of FY2019-20 has been sent along with letter no. NAYARA CPP/ENV/32631/Env Statement/2020/972 dated 06.08.2020.</p> <p>The Environment Statement &amp; EC compliance report have been submitted to ministry via e-mail.</p>
<p>XVII.</p>	<p>The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.</p>	<p>EC compliance report along with monitoring data is uploaded on company website and updated on half yearly basis.</p> <p>Copy of the reports had been submitted to Central pollution control board and state pollution control board.</p> <p>EC compliance report for the period April'20 to September'20 has been submitted to MoEF &amp; CC, Regional Office, Bhopal vide letter No. Nayara CPP/ENV/32631/EC Compliance/2020/996, Dated 26.11.2020.</p> <p>Likewise every 6 monthly EC compliance report submitted to Authority since EC granted by MoEF &amp;CC.</p>

XVIII.	<p>Regional Office of the Ministry of Environment &amp; Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack &amp; ambient air) shall be displayed at the main gate of the power plant.</p>	<p>EC compliance report for the period April'20 to September'20 has been submitted to MoEF &amp; CC, Regional Office, Bhopal vide letter No. Nayara CPP/ENV/32631/EC Compliance/2020/996, Dated 26.11.2020.</p> <p>Likewise every 6 month EC compliance report submitted to Authority since EC granted by MoEF &amp;CC.</p> <p>EC compliance report along with monitoring data is uploaded on company website and updated on half yearly basis.</p> <p>Continuous stack emission and Continuous ambient air quality data is being displayed at main gate.</p>																																												
XIX.	<p>Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.</p>	<p>Cost is earmarked for Environment Mitigation Measures at Project stage itself. Details of the funds earmarked for the environment protection measures are listed in below table.</p> <table border="1" data-bbox="624 1339 1442 1964"> <thead> <tr> <th>Sr. No</th> <th>Name of Equipment</th> <th>Installation Cost Rs. (In Crore)</th> <th>Operation Maintenance Cost per year Rs. (In Crore)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Electrostatic Precipitator</td> <td>120</td> <td>0.1</td> </tr> <tr> <td>2</td> <td>Low NOx Burner</td> <td>52.8</td> <td>0.025</td> </tr> <tr> <td>3</td> <td>Dust Extraction System</td> <td>1.8</td> <td>0.2</td> </tr> <tr> <td>4</td> <td>Dry Fog Dust Suppression System</td> <td>2</td> <td>0.15</td> </tr> <tr> <td>5</td> <td>Ash Conveying System</td> <td>8</td> <td>0.25</td> </tr> <tr> <td>6</td> <td>Stack</td> <td>60</td> <td>0.05</td> </tr> <tr> <td>7</td> <td>Pollution Monitoring &amp; Surveillance System</td> <td>1</td> <td>0.025</td> </tr> <tr> <td>8</td> <td>Green Belt</td> <td>2</td> <td>0.05</td> </tr> <tr> <td>9</td> <td>Others</td> <td>2.5</td> <td>0.15</td> </tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>250</b></td> <td><b>1</b></td> </tr> </tbody> </table>	Sr. No	Name of Equipment	Installation Cost Rs. (In Crore)	Operation Maintenance Cost per year Rs. (In Crore)	1	Electrostatic Precipitator	120	0.1	2	Low NOx Burner	52.8	0.025	3	Dust Extraction System	1.8	0.2	4	Dry Fog Dust Suppression System	2	0.15	5	Ash Conveying System	8	0.25	6	Stack	60	0.05	7	Pollution Monitoring & Surveillance System	1	0.025	8	Green Belt	2	0.05	9	Others	2.5	0.15	<b>Total</b>		<b>250</b>	<b>1</b>
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XX.	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Date of financial closure and commissioning of plant was 31 <sup>st</sup> December 2012, has been submitted along with letter no. NAYARA ENERGY LTD. (CPP)/ENV/EC compliance/ 2013/408, dated 31.10.2013.
XXI.	Full cooperation shall be extended to the scientists/ officers from the ministry/ Regional Office of the ministry at Bhopal / CPCB/ GPCB, who would be monitoring the compliance of environmental status.	Full cooperation is provided to the scientists/ officers from the ministry/ Regional Office of the ministry at Bhopal / CPCB/ GPCB, who would be monitoring the compliance of environmental status.
5.	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	Noted.
6.	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.	Ministry has extended the validity of EC up to 20.09.2021 vide letter no. J-13012/130/2008-IA.II (T) dated 7 <sup>th</sup> August, 2018.

<p>7.</p>	<p>Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.</p>	<p>Noted.</p>
<p>8.</p>	<p>In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.</p>	<p>Noted.</p>
<p>9.</p>	<p>The above stipulations would be enforced among others under the Water (Prevention &amp; Control of Pollution) Act, 1974, the Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous wastes (Management, Handling and Transboundary Movement) Rules, 2008 and its amendments.</p>	<p>Regular updates related to Water (Prevention &amp; Control of Pollution) Act, 1974, the Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016 and its amendments are being referred continuously and implemented the same in plant wherever applicable.</p>

Sr. No.	Additional Conditions	
i	Revised emission standards as per the Ministry's notification dated 07.12.2015 and subsequent amendments notified from time to time shall be complied. In case, plant is ready for commissioning and not meeting revised emission norms, operation shall be stopped unless there is an extension given through a specific direction by MOEFCC/ CPCB or amendment in notification is issued.	Revised emission standards as per the Ministry's notification dated 07.12.2015 and subsequent amendments notified from time to time have been implemented in our CC&A conditions by GPCB and the compliance status of the same is provided against specific condition no. VII.
ii	In case STP are located within 50 km from the project site then the treated water shall be used in the plant.	Noted.
iii	Local indigenous species shall be planted as a part of greenbelt development plan in consultation with local social forestry department.	M/s NAYARA ENERGY LTD. (CPP) is situated within the M/s Nayara Energy Limited (Formerly known as Essar Oil Ltd.) premises. The green belt of the NAYARA ENERGY LTD. (CPP) is covered under the M/s Nayara Energy Limited green belt & M/s Nayara Energy Limited has developed green belt in 410 Ha of area.





ક્રમાંક :- ક/જમન/૨૪/ટિ-૭/

/ સને ૨૦૧૬--૧૭

મુખ્ય વન સંરક્ષકશ્રીની કચેરી,  
મરીન નેશનલ પાર્ક,  
વન સંકુલ,  
નાગનાથ ગેઈટ પાસે,  
જામનગર-૩૬૧ ૦૦૧  
તા. 10/૨/૨૦૧૭

પ્રતિ,  
મનેજરશ્રી,  
એસસાર વાડીનાર પાવર કંપની લી.,  
પો.બો. નં. ૨૪,  
ખંભાળીયા, જી. જામનગર

૨૨

વિષય :- Regarding Application or VPCL for clearance from  
National Board or Wildlife

સંદર્ભ :- આપનાં પત્રાંક :- VPCL/Env/Application to NWLB/32631/650/  
Dt 27/1/2017

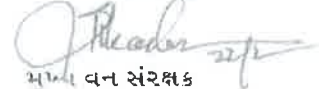
મહાશય,

જય ભારત સાથે ઉપરોક્ત વિષયે જણાવવાનું કે, મરીન નેશનલ પાર્ક, જામનગર હેઠળના આપના ધ્વારા અત્રેને એસસાર પાવર કંપની લી. ૪૮૩ મેગાવોટ કો-જનરેશન મલ્ટી ફ્યુલ પાવર પ્લાન સ્થપવા માટેની દરખાસ્ત કરેલ

વધુમાં જણાવવાનું કે, અત્રેના કાર્યક્ષેત્ર હેઠળનાં જંગલ / મરીન નેશનલ પાર્ક અને મરીન અભ્યારણ્ય વિસ્તારમાંથી આવતો નથી. તેમજ દરીયાકાંઠા થી જમીન સાઈટ ઉપર ઈકો સેન્સેટીવ ઝોન અગાઉ જાહેર ના થયેલ હોય જેથી ૧૦કી.મી. લાગુ પડતો હતો પરંતુ આપનો પ્રોજેક્ટ સાઈટ મરીન નેશનલ પાર્ક અને મરીન અભ્યારણ્ય વિસ્તારથી ૮કી.મી. દુર આવતો હોવાથી સરકારશ્રીના પ્રવર્તમાન કાયદા મુજબની જોગવાઈ મુજબ વાઈલ્ડ લાઈફ કલીયરન્સ અંગેની જરૂરી દરખાસ્ત આ કચેરીને મોકલવામાં આવેલ હતી.

પરંતુ મરીન નેશનલ પાર્ક / સેન્કચુરી વિસ્તારને જમીન તરફની એક કિ.મી. ની ત્રિજ્યામાં ઈકો સેન્સેટીવ ઝોન સરકારશ્રી તરફથી તારીખ:-૨૨/૦૮/૨૦૧૭થી જાહેર કરવામાં આવેલ છે. જેથી આપનો પ્રોજેક્ટ મરીન નેશનલ પાર્ક અને મરીન અભ્યારણ્ય વિસ્તારથી ૮કી.મી. દુર આવેલ હોય જેથી ઈકો સેન્સેટીવ ઝોનમાં સમાવેશ થતો નથી. જે જાણ થવા વિનંતી.

આપનો વિશ્વાસ,



મુખ્ય વન સંરક્ષક  
મરીન નેશનલ પાર્ક  
જામનગર

નકલ સાદર રવાના:- અગ્ર મુખ્ય વન સંરક્ષકશ્રી વન્યપ્રાણી ગુ.રા.ગાંધીનગર તરફ જાણ સારું

## Translation of letter received from Chief Conservator of Forest Office, Jamnagar

No.: K/JMN/24/Te-7/689-90/Year 2016-17

Office of Chief Conservator of Forest  
Marin National Park,  
Forest Department,  
Near Nagnath Gate,  
Jamnagar – 361 001  
Date:- 22/02/2017

To,  
Manager,  
Essar Vadinar Power Company Ltd.  
Po. Box No. 24  
Khambhaliya,  
Dist:- Jamnagar

Subject: - Regarding application of VPCL for clearance from National Board of Wildlife

Reference:- Your letter – VPCL/ENV/Application to NWLB/32631/650 dated 27.01.2017

Sir,

With reference to above subject matter, we would like to inform you that, you had made an application for Installation of Power Plant with capacity of 483 Megawatt, Co-generation Multi fuel as Essar Power Company Limited under Marine National Park, Jamnagar.

Furthermore, we would like to inform you that above project area does not cover under the Forest / Marine National Park and Marine National Sanctuary Area. Eco sensitive Zone was not declared previously for Coast to Land site, thus 10Km radius was applicable to your project site as it is at distance of 8 km from Marine National Park and Marine National Sanctuary, so as per Government's previous notification of Wildlife Clearance related application was sent by you to this department.

However, Government has declared the area of 1 KM radius landward site from Marine National Park / Sanctuary as Eco Sensitive Zone on date 22.08.2013. We would like to inform you that your project which is 8 km away from Marine National Park and Marine National Sanctuary thus it is not covered under Eco Sensitive Zone.

Yours Faithfully  
Chief Conservator of Forest  
Marin National Park  
Jamnagar.

For your information only: A copy of the above letter has been dispatched to Principal Chief Conservator of Forest, Gandhinagar.



Reference No: Nayara CPP/ENV/Fly Ash/2021/32631/1021  
28<sup>th</sup> April, 2021

To,  
**The Member Secretary**  
Gujarat Pollution Control Board,  
Paryavaran Bhavan, Sector-10 A,  
Gandhinagar-382010

**Subject:** Annual Compliance Report of Fly Ash Disposal for FY 2020-21

**Reference:** XGN ID 32631

Dear Sir,

We would like to submit Annual Compliance Report of Fly Ash Disposal for FY 2020-21 as required under sub paragraph (7) of para 2 of the fly ash notification 2009. The Annual Compliance Report is enclosed as **Annexure – 1**.

Thanking you,

Yours sincerely,

For, **Nayara Energy Ltd. (CPP)**,

A handwritten signature in black ink, appearing to read "Jay Pandya", is written over a light blue circular stamp.

**Jay Pandya**  
(Head Environment)

**Enclosure:** Annexure: I - Annual Compliance Report of Fly Ash Disposal FY 2020-21

**Copy To:**

- 1) Regional Officer, GPCB, Sardar Patel Bhavan, Rameshwar Nagar, Jamnagar – 361 008
- 2) MoEF&CC, Regional Office, Kendriya Paryavaran Bhavan, E-5, Area Colony, Ravi Shankar Nagar, Link Road No. 3, Bhopal – 462016
- 3) The Chairman, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi – 110 032

**Registered Office:**  
Khambhalla, Post Box No.24, Dist. Devbhumi Dwarka, Gujarat 361 305, India  
T +91 2833 661444 | F +91 2833 662929

CIN: U11100GJ1989PLC032116  
www.nayaraenergy.com

**Nayara Energy Limited (Formerly Essar Oil Limited)**  
5<sup>th</sup> Floor, Jet Airways Godrej BKC, Plot No. C-68, G Block,  
Bandra Kuria Complex, Bandra East, Mumbai 400051, India

T +91 22 66 121800 | F +91 22 6708 2177  
E refinery@nayaraenergy.com

Reference No.: Nayara CPP/ENV/Fly Ash/2021/32631/1021

Annual Compliance Report of Fly Ash Disposal For FY 2020-21									
Sr. No.	Month	Balance in Ash Pond		Generation (MT)		Disposal (MT)		Target Utilization	Remarks
		Fly Ash	Bottom Ash	Fly Ash	Bottom Ash	Fly Ash	Bottom Ash		
1	Apr'20	6010	2320	10323	518	5156	223	Cement Industry	1) Shri Digvijay Cement Co. Ltd: 3145.29 MT
									2) Stallion Energy Pvt. Ltd: 23.78 MT
									3) Ultratech Cement Ltd.: 472.73 MT
									4) Anand Trading Co.: 951.57 MT
									5) Saurashtra Cement Ltd.: 562.78 MT
								Brick manufacturer	6) Maheshwari Suppliers: 223.37 MT
2	May'20	5849	2341	8400	454	7674	433	Cement Industry	1) Ambuja Cements Ltd.: 165.84 MT
									2) Saurashtra Cement Ltd.: 657.95 MT
									3) Shri Digvijay Cement Co. Ltd: 4427.76 MT
									4) Stallion Energy Pvt. Ltd: 604.24 MT
									5) Anand Trading Co.: 963.42 MT
									6) Gujarat Sidhee Cement Ltd: 394.81 MT
									7) Shri Gurukrupa Trading Co.: 28.28 MT
									8) Ultratech Cement Ltd.: 431.46 MT
								Brick manufacturer	9) Maheshwari Suppliers: 386.25 MT
									10) Arjunsinh Balubha Jadeja: 46.74 MT
3	Jun'20	3159	2212	7182	499	9748	627	Cement Industry	1) Ambuja Cements Ltd.: 438.66 MT
									2) Saurashtra Cement Ltd.: 744.09 MT
									3) Shri Digvijay Cement Co. Ltd: 7087.14 MT
									4) Stallion Energy Pvt. Ltd: 286.45 MT
									5) Ultratech Cement Ltd.: 243.01 MT
									6) Anand Trading Co.: 304.28 MT
									7) Gujarat Sidhee Cement Ltd: 644.04 MT
								Brick manufacturer	8) Maheshwari Suppliers: 627.45 MT
4	Jul'20	2755	2098	6901	552	7918	666	Cement Industry	1) Ambuja Cements Ltd.: 781.12 MT
									2) Saurashtra Cement Ltd.: 690.36 MT
									3) Shri Digvijay Cement Co. Ltd: 4101.07 MT
									4) Stallion Energy Pvt. Ltd: 554.14 MT
									5) Anand Trading Co.: 573.85 MT
									6) Gujarat Sidhee Cement Ltd: 584.54 MT
									7) Shri Gurukrupa Trading Co.: 27.66 MT
									8) Ultratech Cement Ltd.: 605.51 MT
								Brick manufacturer	9) Maheshwari Suppliers: 666.46 MT

Reference No.: Nayara CPP/ENV/Fly Ash/2021/32631/1021

Sr. No.	Month	Balance in Ash Pond		Generation (MT)		Disposal (MT)		Target Utilization	Remarks
		Fly Ash	Bottom Ash	Fly Ash	Bottom Ash	Fly Ash	Bottom Ash		
5	Aug'20	2755	2044	6477	497	6514	551	Cement Industry	1) Ambuja Cements Ltd.: 400.14 MT
									2) Anand Trading Co.: 164.79 MT
									3) Gujarat Sidhee Cement Ltd: 137.71 MT
									4) Shri Digvijay Cement Co. Ltd: 4110.8 MT
									5) Saurashtra Cement Ltd.: 442.46 MT
									6) Stallion Energy Pvt. Ltd.: 573.68 MT
									7) Ultratech Cement Ltd.: 684.01 MT
								Brick manufacturer	8) Maheshwari Suppliers: 551.15 MT
6	Sep'20	2755	1668	7097	533	7542	908	Cement Industry	1) Ambuja Cements Limited: 174.22 MT
									2) Anand Trading Company: 905.35 MT
									3) Gujarat Sidhee Cement Ltd: 577.8 MT
									4) Shri Digvijay Cement Co Ltd: 3965.15 MT
									5) Saurashtra Cement Ltd.: 742.56 MT
									6) Stallion Energy Pvt. Ltd.: 591.47 MT
									7) Ultra tech Cement Limited: 585.58 MT
								Brick manufacturer	8) Maheshwari Suppliers: 844.16 MT
									9) Arjunsinh Balubha Jadeja: 64.03 MT
7	Oct'20	2755	1229	5132	314	4594	754	Cement Industry	1) Ambuja Cements Ltd.: 28.98 MT
									2) Anand Trading Co.: 1831.34 MT
									3) Gujarat Sidhee Cement Ltd: 107.53 MT
									4) Saurashtra Cement Ltd.: 177.13 MT
									5) Shri Digvijay Cement Co Ltd: 2163.1 MT
									6) Stallion Energy Pvt. Ltd.: 257.32 MT
									7) Ultra tech Cement Limited: 28.52 MT
								Brick manufacturer	8) Maheshwari Suppliers: 753.65 MT
8	Nov'20	2755	1023	6437	550	6960	755	Cement Industry	1) Ambuja Cements Ltd.: 609.63 MT
									2) Anand Trading Co.: 1893.6 MT
									3) Saurashtra Cement Ltd.: 886.92 MT
									4) Shri Digvijay Cement Co Ltd: 3031.96 MT
									5) Stallion Energy Pvt. Ltd.: 379.18 MT
									6) Ultra tech Cement Ltd.: 27.14 MT
								Brick manufacturer	7) Maheshwari Suppliers: 755.17 MT
9	Dec'20	2755	614	7306	590	6809	1000	Cement Industry	1) Ambuja Cements Ltd.: 729.51 MT
									2) Anand Trading Co.: 1940.69 MT
									3) Gujarat Sidhee Cement Ltd: 217.07 MT
									4) Saurashtra Cement Ltd.: 863.08 MT
									5) Shri Digvijay Cement Co Ltd: 2726.54 MT
									6) Stallion Energy Pvt. Ltd: 331.77 MT
								Brick	7) Maheshwari Suppliers: 977.28 MT

Reference No.: Nayara CPP/ENV/Fly Ash/2021/32631/1021

Sr. No.	Month	Balance in Ash Pond		Generation (MT)		Disposal (MT)		Target Utilization	Remarks
		Fly Ash	Bottom Ash	Fly Ash	Bottom Ash	Fly Ash	Bottom Ash		
								manufacturer	8) Shakti Enterprise: 22.84 MT
10	Jan'21	2755	629	7151	602	7249	587	Cement Industry	1) Ambuja Cements Ltd.: 436.6 MT
									2) Anand Trading Co.: 2726.22 MT
									3) Gujarat Sidhee Cement Ltd: 125.88 MT
									4) Saurashtra Cement Ltd.: 775.37 MT
									5) Shri Digvijay Cement Co Ltd: 2947.34 MT
									6) Stallion Energy Pvt. Ltd.: 237.76 MT
								Brick manufacturer	7) Maheshwari Suppliers: 465.9 MT
									8) Shakti Enterprise: 121.18 MT
11	Feb'21	2755	404	6237	446	5989	672	Cement Industry	1) Ambuja Cements Ltd.: 58.52 MT
									2) Anand Trading Co.: 2344.17 MT
									3) Gujarat Sidhee Cement Ltd: 501.97 MT
									4) Saurashtra Cement Ltd.: 675.91 MT
									5) Shri Digvijay Cement Co Ltd: 2122.79 MT
									6) Stallion Energy Pvt. Ltd.: 285.42 MT
								Brick manufacturer	7) Maheshwari Suppliers: 626.68 MT
									8) Shakti Enterprise: 45.15 MT
12	Mar'21	2755	21	6923	593	6368	975	Cement Industry	1) Ambuja Cements Ltd.: 86.7 MT
									2) Anand Trading Co.: 1793.99 MT
									3) Gujarat Sidhee Cement Ltd: 414.18 MT
									4) Shree Digvijay Cement Co Ltd: 3221.6 MT
									5) Saurashtra Cement Ltd.: 568.08 MT
									6) Stallion Energy Pvt. Ltd.: 283.06 MT
								Brick manufacturer	7) Maheshwari Suppliers: 931.76 MT
									8) Shakti Enterprise: 43.68 MT



FOR BETTER ENVIRONMENT & HEALTH

ANACON LABORATORIES PVT. LTD.

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- Approved by : Food Safety & Standards Authority of India under FSS Act;
- Bureau of Indian Standards (BIS); Agricultural & Processed Food Products Export Development Authority (APEEDA);
- Export Inspection Council (EIC); AGMARK;

## TEST REPORT

Test Report No. : ALPL/19042021/02-2

Dated 19.04.2021

Page 1 of 3

<b>Issued To :</b> M/s Nayara Energy Limited 39 KM Jamnagar Okha Highway, Vadinar, Devbhumi Dwarka, Gujarat- 361305 Kind Attention : Mr Piyush Lad Contact No. : 0635/074412		<b>Sample Inward No.</b> 2021/EG 384/02 2- <b>Inward Date</b> 08.04.2021 <b>Reference</b> PO 5300003075 <b>Reference Date</b> 31.03.2018	<b>Analysis Start</b> 08.04.2021 <b>Analysis End</b> 19.04.2021 <b>Sample Category</b> General
<b>Sample Name</b> Bottom Ash	<b>Sample Particulars</b> Sample 2: Bottom Ash ,Code : 6967	<b>Quantity Received</b> 1 kg	
<b>Sample Collected By</b> M/s Nayara Energy Limited			
Tests Required : TCLP Analysis, Pesticide residue.			

### TEST RESULTS

Initial pH 9.22

After Acid Treatment, pH -2.3

Extraction fluid type I is used

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
<b>TCLP Analysis</b>				
1	Lead (as Pb)	mg/l	ICP-AES	Absent
2	Cadmium (as Cd)	mg/l	ICP-AES	Absent
3	Arsenic (as As)	mg/l	AAS Furnace	Absent
4	Barium (as Ba)	mg/l	ICP-AES	Absent
5	Total Chromium (as Cr)	mg/l	ICP-AES	Absent
6	Mercury (as Hg)	mg/l	AAS VP	Absent
7	Selenium (as Se)	mg/l	ICP-AES	Absent
8	Silver (as Ag)	mg/l	ICP-AES	Absent
<b>Pesticide residue</b>				
9	Chlordane	µg/l	GC-MS/MS	Absent
10	Endrin	µg/l	GC-MS/MS	Absent
11	Heptachlor & its epoxide	µg/l	GC-MS/MS	Absent
12	Hexachlorobenzene	µg/l	GC-MS/MS	Absent
13	Lindane	µg/l	GC-MS/MS	Absent
14	Methoxychlor	µg/l	GC-MS/MS	Absent
15	Toxaphene	µg/l	LC-MS/MS	Absent
16	2,4,5-TP (silvex)	µg/l	GC-MS/MS	Absent
17	2,4-D	µg/l	LC-MS/MS	Absent
18	Pentachlorophenol	µg/l	GC-MS/MS	Absent
19	2,4,5 Trichlorophenol	µg/l	GC-MS/MS	Absent
20	2,4,6 Trichlorophenol	µg/l	GC-MS/MS	Absent
21	2-Methylephenol (O-Cresol)	µg/l	GC-MS/MS	Absent
22	3- Methylphenol	µg/l	GC-MS/MS	Absent

NOTES : • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only  
• Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Liability of Anacon Labs is limited to invoiced amount only. • Non perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. • 'µg/l' is equivalent to 'ppb'.  
• 'mg/l' is equivalent to 'ppm'.

Verified By

Shashikant Satdeve  
Sr. Chemist

Sonali Gharpure  
Technical Manager

Authorized Signatory

Dr. (Mrs.) S.D. Garway  
Quality Manager

Laboratory address : FP-34, 35, Food Park, 5 Star Industrial Estate, MIDC Butibori, Nagpur - 441 122.  
Email : support@anacoin.in;  
Please Visit us at : www.anacoinlaboratories.com

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- Bureau of Indian Standards (BIS); Agricultural & Processed Food Products Export Development Authority (APEDA);
- Export inspection council (EIC); AGMARK.

**TEST REPORT**

Test Report No. : ALPL/19042021/02-1

Dated 19.04.2021

Page 1 of 3

<b>Issued To :</b> M/s Nayara Energy Limited 39 KM Jamnagar Okha Highway, Vadlnar, Deybhumi Dwarka, Gujarat- 361305 <b>Kind Attention :</b> Mr. Piyush Lad <b>Contact No. :</b> 0635707412	<b>Sample Inward No.</b> 2021/EG-384/02-1 <b>Inward Date</b> 08.04.2021 <b>Reference</b> PO :5300003075  <b>Reference Date</b> 31.03.2018	<b>Analysis Start</b> 08.04.2021 <b>Analysis End</b> 19.04.2021  <b>Sample Category</b> General
<b>Sample Name</b> Fly Ash	<b>Sample Particulars</b> Sample 1: Fly Ash, Code : 6966	<b>Quantity Received</b> 1 kg
<b>Sample Collected By</b> M/s Nayara Energy Limited		
<b>Tests Required :</b> ICLP Analysis, Pesticide residue.		

**TEST RESULTS**

Initial pH - 10.2

After Acid Treatment, pH 4.70

Extraction fluid type I is used

S.N.	Test Parameter	Measurement Unit	Test Method	Test Result
<b>ICLP Analysis</b>				
1	Lead (as Pb)	mg/l	ICP-AES	Absent
2	Cadmium (as Cd)	mg/l	ICP-AES	Absent
3	Arsenic (as As)	mg/l	AAS Furnace	Absent
4	Barium (as Ba)	mg/l	ICP-AES	Absent
5	Total Chromium (as Cr)	mg/l	ICP-AES	Absent
6	Mercury (as Hg)	mg/l	AAS VP	Absent
7	Selenium (as Se)	mg/l	ICP-AES	Absent
8	Silver (as Ag)	mg/l	ICP-AES	Absent
<b>Pesticide residues</b>				
9	Chlordane	µg/l	GC-MS/MS	Absent
10	Endrin	µg/l	GC-MS/MS	Absent
11	Heptachlor & its epoxide	µg/l	GC-MS/MS	Absent
12	Hexachlorobenzene	µg/l	GC-MS/MS	Absent
13	Lindane	µg/l	GC-MS/MS	Absent
14	Methoxychlor	µg/l	GC-MS/MS	Absent
15	Toxaphene	µg/l	LC-MS/MS	Absent
16	2,4,5-TP (silvex)	µg/l	GC-MS/MS	Absent
17	2,4-D	µg/l	LC-MS/MS	Absent
18	Pentachlorophenol	µg/l	GC-MS/MS	Absent
19	2,4,5 Trichlorophenol	µg/l	GC-MS/MS	Absent
20	2,4,6 Trichlorophenol	µg/l	GC-MS/MS	Absent
21	2-Methylephenol (O-Cresol)	µg/l	GC-MS/MS	Absent
22	3-Methylephenol	µg/l	GC-MS/MS	Absent

NOTES : • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Liability of Anacon Labs is limited to invoiced amount only. • Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. • 'µg/l' is equivalent to 'ppb'. • 'mg/l' is equivalent to 'ppm'.



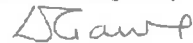
Verified By

Shashikant Satdeve  
Sr. Chemist



Sonali Gharpure  
Technical Manager

Authorized Signatory



Dr. (Mrs.) S.D. Garway  
Quality Manager

Laboratory address : FP-34, 35, Food Park, 5 Star Industrial Estate, MIDC Butibori, Nagpur - 441 122.  
Email : support@anacon.in;  
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**Annexure – IV**  
**Monitoring Results of Ground Water Quality of Surrounding Village**



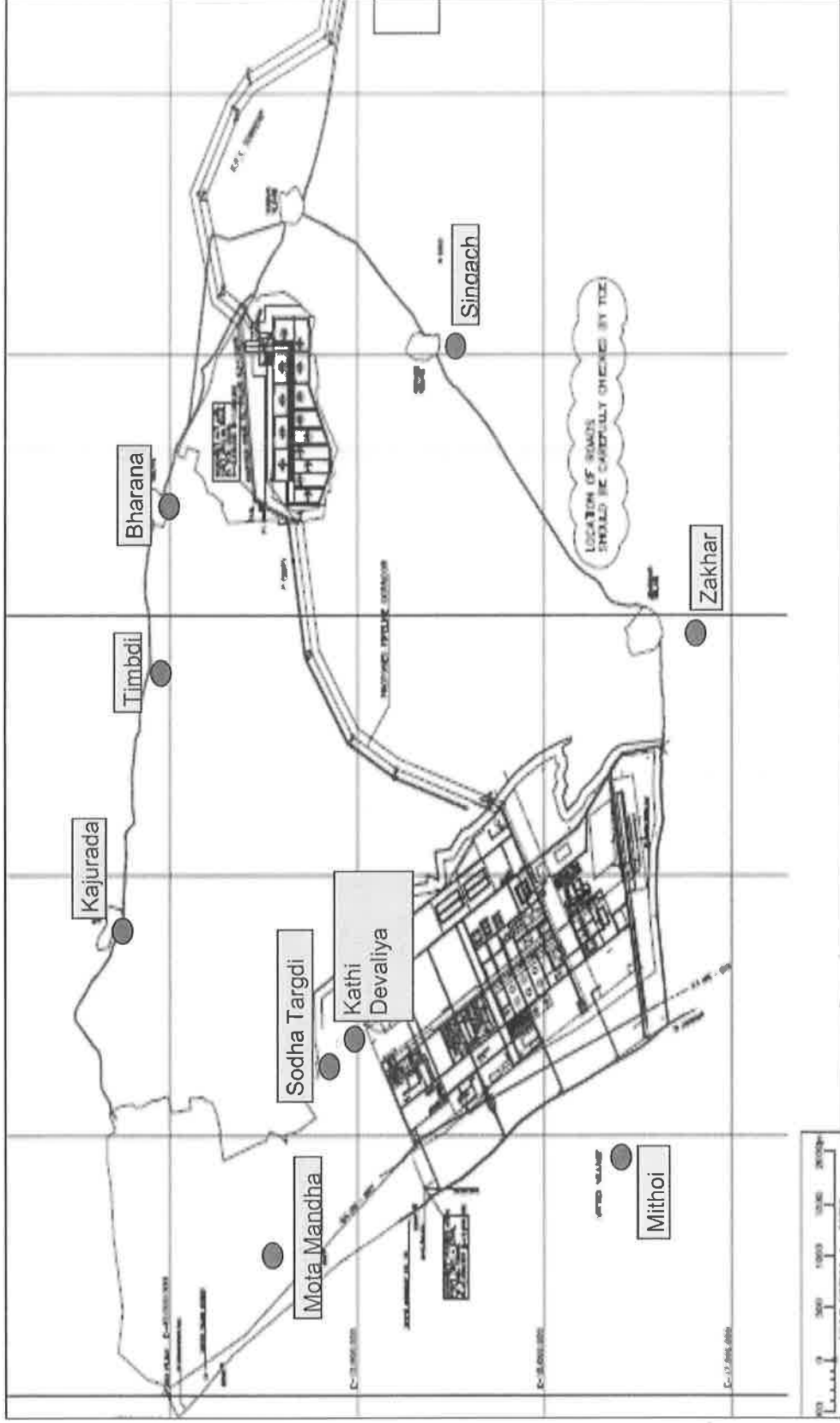
**Monitoring Results of Ground Water Quality of Surrounding Villages**

**Parameters analyzed**

Sr. No	NAME OF THE VILLAGE	pH	Total Dissolved Solids (TDS ), (in ppm)	T. Hardness, (in ppm)	Oil & Grease, (in ppm)	Sulfate, (in ppm)	Chloride, (in ppm)
1	Vadinar	7.39	1086	497	<4	73	290
2	Bharana	7.05	340	209	<4	35	30
3	Kathi Devaliya	7.18	990	627	<4	145	280
4	Zakhar	7.02	1600	1150	<4	205	680
5	Singach	7.08	340	209	<4	298	30
6	Kajurada	6.97	3820	2190	<4	224	2020
7	Sodha Taragadi	7.26	680	348	<4	54	68
8	Timbadi	7.71	1120	706	<4	98	410
9	Mithoi	8	830	417	<4	92	237

**\* Well water samples collected and analyzed in December, 2020**

Annexure – IV  
Monitoring Results of Ground Water Quality of Surrounding Village



Location of Villages

**Annexure - V**

**CSR Activities by M/s NAYARA ENERGY LTD. (CPP).**

M/s NAYARA ENERGY LTD. (CPP) is committed to maintaining the highest standards of CSR in its business activities and aims to make a difference to the communities around. M/s NAYARA ENERGY LTD. (CPP) collaborates with key stakeholders, especially the local administration and institutions to facilitate development with initiatives in education, livelihoods, women's empowerment and health. The interventions are in line with the UN Sustainable Development Goals (SDGs) and the provisions under the Companies' Act, 2013.

**CSR Activities carried out in October'20 – March'21 are as under:**

<b>Project</b>	<b>Beneficiaries</b>	<b>Amount</b>
Sustainable Livelihoods (Water Tanker Supply)	19,156 from 6 villages	60,00,000/-
Sustainable Livelihoods (Fodder Assistance)	5542 from 12 villages	49,00,000/-
Construction of boundary wall in the cremation ground	-	11,00,000/-
<b>Total</b>		<b>1,20,00,000/-</b>

