

Reference: Nayara/ENV/EC Compliance Report/20 to 46 MMTPA/2025/1355

7th May, 2025

To,

The Deputy Director General of Forests (C),

Ministry of Environment, Forest and Climate Change,

Integrated Regional Office, Gandhinagar, A wing-407 & 409,

Aranya Bhawan, Near CH-3 Circle, Sector-10A,

Gandhinagar-382010

Subject:

Submission of Six-monthly EC compliance report for expansion of refinery capacity from 20 MMTPA to 46 MMTPA with Petro-chemical Complex by M/s Nayara Energy Limited located

at Vadinar, District: Devbhumi Dwarka, Gujarat as on 1st April 2025.

Reference:

Environment Clearance accorded to M/s Nayara Energy Limited vide F. No: J-

11011/320/2006-IA-II (I) dated 5th January 2021.

Dear Sir,

This has reference to the Environmental Clearance (EC) issued by Ministry of Environment, Forests & Climate Change, Government of India vide above referred letter. As per General Condition No. (VII) of the Environmental Clearance, we hereby submit our six-monthly compliance status report for the period Oct'24 to Mar'25 for your kind perusal and record please.

Thanking you,

Yours truly,

For, Nayara Energy Limited

Authorized Signatory

Enclosures: EC compliance report for expansion of refinery capacity from 20 MMTPA to 46 MMTPA with Petro-chemical Complex.

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.

Registered Office:

Khambhalia, 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" Floor, Jet Airways Godrej BKC, Plot No. C-68, G Block, Bandra Kurla Complex, Bandra East, Mumbai 400051, India

T +91 22 66 121800 | F +91 22 6708 2177

E refinery@nayaraenergy.com



Period: October 2024 to March 2025

EC CONDITIONS COMPLIANCE STATUS OF NAYARA ENERGY LIMITED, VADINAR, GUJARAT

Environment Clearance for Expansion of Refinery capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex

(Ref.: File No. J-11011/320/2006-IA-II (I) dated 05th January, 2021)

Status as on 01st April 2025

Sr. No.	Specific Conditions	Current Status
I	The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8 th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.	The proposed expansion will take place at the available land within the existing refinery, adjacent Petrochemical Plot & COT Premises only. Scope of work of the Project does not include work in the protected area. Hence this condition is not applicable.
II	The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.	Site specific conservation plan covering Schedule-1 species 'Indian Peafowl' has been prepared & approved by Chief Wildlife Warden. As per the Wildlife conservation Plan, budgetary provision in the tune of INR. 40 Lacs has been made for 10 years period for the activities mentioned in conservation plan @ INR. 4 lacs per year for the next 10 years. Details of activities covered under the Conservation plan and cost break-up is included in approved Peafowl conservation plan. Site specific Conservation plan will be implemented upon start of the project execution.
III	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry.	Project construction is yet to start.



	All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	We assure to comply with all the environmental protection measures and safeguards proposed in the documents submitted with the Ministry.
IV	The treated effluent of 536.5 MLD Desalination/RO Reject & 36.5 MLD shall be sent for deep sea discharge through diffuser recommended by NIO.	The Project construction is yet to start. It will be ensured that total discharge to deep-sea remains within specified limit of total 573 MLD and will be discharged through diffuser recommended by NIO.
V	The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18 th March, 2008 and G.S.R. 595(E) dated 21 st August, 2009 as amended from time to time, shall be followed.	The project construction is yet to start. We assure you to comply with the stipulated condition.
VI	Volatile organic compounds (VOCS)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.	The project construction is yet to start. We assure to comply with the stipulated condition.
VII	Total freshwater requirement for the proposed project shall not exceed 724 MLD to be met from Sea water. Necessary permission in this regard shall be obtained from the concerned regulatory authority.	We assure you to comply with the condition. Necessary clearances will be obtained in this regard.
VIII	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	The project construction is yet to start. We assure you to comply with the condition.
IX	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Project construction is yet to start. We assure you to comply with the condition.



Х	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	The project construction is yet to start. We assure you to comply with the condition. All the hazardous waste will be disposed as per the Hazardous & Other Waste (Management & Transboundary movement) Rules, 2016.
ΧI	Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.	The condition is not applicable as the subject EC has been granted for expansion of Refinery along with Petrochemical complex.
XII	The company shall undertake waste minimization measures as below: - a. Metering and control of quantities of active ingredients to minimize waste. b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. c. Use of automated filling to minimize spillage. d. Use of Close Feed system into batch reactors. e. Venting equipment through vapour recovery system. f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.	Project construction is yet to start. We assure you to undertake measures for waste minimization & other stipulated conditions as applicable to our project.
XIII	The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 33% greenbelt area vis-à-vis the project area through afforestation in the degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Project construction is yet to start. Total 33% greenbelt area vis-à-vis the project area will be developed.



XIV	The CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including medical, education/skill development, potable water supply, solar lights, village roads, and scholarship for higher education, support to farmers & fishermen with better machinery, fodder for cattle, animal husbandry, and other miscellaneous development works etc., and shall be completed within 5 years. The amount proposed if any in CER shall be spent during execution of the project and shall not be linked with the CSR.	Project construction is yet to start. CER amount will be utilized as per the condition.
XV	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Project construction is yet to start. We assure you to comply with the condition.
XVI	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	We assure you to comply with the condition.
XVII	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.	Project construction is yet to start. Continuous Online (24x7) monitoring system for stack emissions and effluent monitoring have been installed for existing refinery and the data are being transferred to CPCB and SPCB server. The effluent generated from the process units is being received in ETP through closed pipelines. For Online Continuous effluent monitoring, We have installed flow meter at ETP outlet. We will continue the same practices during proposed expansion project also.



XVIII	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Project construction is yet to start. We assure to comply with the condition.
XIX	Process safety and risk assessment studies shall be further carried out using advanced, models, and the mitigating measures shall be undertaken/implemented accordingly.	Risk assessment study with 3D modeling has been carried out as a part of EIA studies & submitted to MoEF & CC and the mitigation measures will be implemented accordingly.
хх	The PP should improve the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24x7 hours monitoring system (of the discharge) and the same should be connected to the server of SCPB/CPCB.	Project construction is yet to start. All Effluent Quality Monitoring Analyzers have been connected with SPCB / CPCB server for existing refinery. We assure you to comply with the condition for proposed expansion as well.
Sr. No.	General Conditions	Current Status
110.		
ı	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Project construction is yet to start. We will comply with the provision of EIA Notification, 2006 and amendments made thereunder.



III	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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Project construction is yet to start. Overall noise levels in and around the plant area will be kept well within the standard by provision of noise control measures. The ambient noise level is being monitored for the existing refinery and will be complied with during the proposed expansion project.
IV	The company shall undertake all relevant measures for improving the socio- economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	We assure you to comply with the condition. Project construction is yet to start. Relevant measures for improving the socio-economic conditions of the surrounding area will be undertaken in CER activities as per the details submitted.
V	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Project construction is yet to start. We assure you to comply with the condition. Sufficient funds of Capital & recurring cost provision for environment protection measures have been considered and will be utilized for the Environment Management only and will not be diverted for other purposes.
VI	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad /Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	A copy of the environment clearance letter has been submitted to the District Collector office Jamnagar & Devbhoomi Dwarka. Office copy of the letter is attached herewith as Annexure-1 .
VII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF&CC, the respective Zonal Office of CPCB and SPCB, A copy	Being complied. A copy of EC Compliance report is being submitted to Regional Office of MOEF&CC, the respective Zonal Office of CPCB (Vadodara) and GPCB Head Office



	of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	(Gandhinagar). A copy of EC Compliance report is also posted on the company website.
VIII	The environmental statement for each financial year ending 31 st March in Form-V as is mandated shall be submitted 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 MOEF&CC by e-mail.	Project construction is yet to start. We assure to comply with the condition.
IX	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 SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.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 concerned Regional Office of the Ministry.	Complied with. The advertisement within seven days from the date of issue of the clearance letter has been published in two local newspapers and has been forwarded to the concerned Regional Office of the Ministry/GPCB. Copy of the intimation to MoEF&CC, Regional Office, Bhopal regarding compliance of the same is attached herewith as Annexure-2.
х	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 start of the project.	Project construction is yet to start. However, Pre Project activities like Detailed Feasibility and Configuration selection for part of the Project scope has been completed. We will inform the date of financial closure and final approval of the project to the Regional Office of the Ministry once Project starts.
XI	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.



Period: October 2024 to March 2025

EC CONDITIONS COMPLIANCE STATUS OF NAYARA ENERGY LIMITED, VADINAR, GUJARAT

Environment Clearance for Expansion of Refinery capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex

Additional Conditions for Environment Clearance

(Ref.: GPCB-CCA-JMN-366(25)/ID-27398/685387, Dated; 06/10/2022)

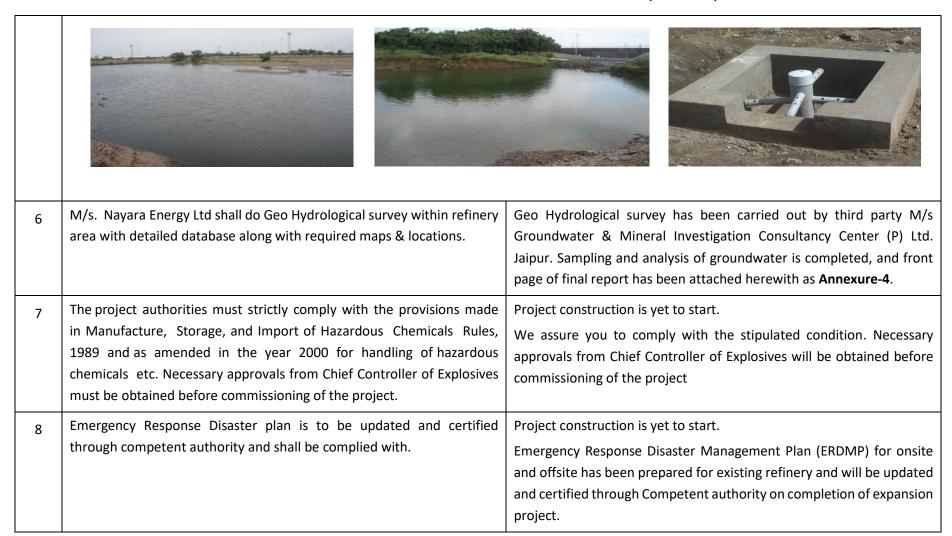
Status as on 01st April 2025

Sr. No.	Additional EC Conditions	Current Status
1	M/s. Nayara Energy Ltd. Shall carry out Mangrove afforestation of 100 hectare area before 31/12/2024 at their own cost in nearby areas in consultation with Marine National Park.	100 ha mangrove plantation has been carried out before 31/12/2024. Mangrove afforestation sites allocated by Marine National Park, Forest Dept, Jamnagar. Mangrove afforestation with raised bed model were completed in identified 50 hectare area in Sikka Range & 50 hectare area in Khambhaliya Range of Marine National Park making total 100 hectare Mangrove Afforestation. Mangrove plantation work has been completed and received certificate for Mangrove Afforestation from the respective Range Forest Officer, Sikka and Khambhalia. Apart from above under Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)) - Govt of India program we have signed a MoU with Forest Dept, Govt. of Gujarat to carry out 1000 ha mangrove plantation in the next five years. As per above MOU, 200 ha has been carried out by Forest department and certificate of the same is enclosed as Annexure-3 . Pictures of Mangrove Afforestation are given below:



	NAYANA ENCROY LINTED Paper II Management II	NYARA ENERGY LIMITED Praject: Mans rove Afforcate Jan (Humbaling Range) Area by Jackson and Area by Jackso	
2	Marine National Park officials may visit the site for inspection as and when required during the project construction / development phase.	Agreed. Marine National Park officials may visit the site for inspection at any time during project construction and development phase.	
3	Awareness Program regarding local flora, fauna, safety, Environment Protection etc. shall be imparted to the local public & School Children once in six month for next five years at their own cost involving Marine national park, Gujarat Pollution Control Board. Indian Coast Guard & District Industrial Safety & Health.	Project construction is yet to start. We assure you to comply with the stipulated condition.	
4	The discharge of return seawater shall be monitored on monthly basis by third party NABL accredited laboratory and the report to be submitted six monthly to GPCB.	Project construction is yet to start. We assure to comply with the stipulated condition.	
5	M/s. Nayara Energy Ltd. shall undertake rainwater-harvesting measures to recharge the ground water in the refinery area premises.	Six Nos. reservoirs / ponds have been developed within refinery premises for storage and recharging of ground water. Total capacity of these ponds is 6,25,000 m ³ . Four Nos. ground water recharge wells have been made at strategic locations within refinery.	





Reference No. Nayara Energy/ENV/2021/1004 12th January, 2021

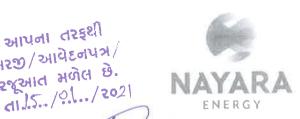
To.

The Collector.

District Collector Office, Devbhumi Dwarka, District Seva Sadan, 1stFloor, Lalpur Bypass Road, Dharampur, Khambhalia, Gujarat - 361305

આતવા વડકંદ્યી अर७/आवेहनपत्र/

રજૂઆત મળેલ છે.



Subject

: Environmental Clearance issued for Expansion of Refinery Capacity from 20 MMTPA to 46

MMTPA with Petrochemical Complex to M/s Nayara Energy Limited, Vadinar, Devbhumi

Dwarka, Gujarat.

Reference: Letter no. F. No. J-11011/320/2006-IA - II (I), dated: 05.01.2021.

Dear Sir.

We are pleased to inform you that, M/s Nayara Energy Limited has been accorded Environmental Clearance for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex at Vadinar, Devbhumi Dwarka, Gujarat vide letter referred above.

Please find enclosed herewith copy of the Environmental Clearance letter for the compliance of General Conditions No. 13.1 (VI) as below:

Environmental Clearance Gene	ral Condition 13.1 (VI)
------------------------------	-------------------------

"A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representation, if any, were received while processing the proposal."

Navara Energy Compliance

A copy of the Environment Clearance letter is enclosed as Annexure-1.

Thanking You,

For Nayara Energy Ltd.

P. R. Dixit

(Head - HSEF)

Enclosures:

Annexure-1 (Environmental Clearance issued by MoEF&CC for Expansion of Refinery

Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex to Nayara Energy

Limited)

Registered Office: Khambhalia, 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) 5th Floor, Jet Airways Godrel BKC, Plot No. C-68, G Block, Bandra Kurla Complex, Bandra East, Mumbal 400051, India

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

Reference No. Nayara Energy/ENV/2021/1005 3 / ० / २०२ / आध्यन्ध 12th January, 2021 स्टब्सी अटक/आवेडक प्रवृद्धिकार



To.

The Collector,

District Collector Office, Jamnagar, District Seva Sadan, Near Police Line, Jamnagar, Gujarat - 361008 રભાણી શાખા કલેક્ટરી કરેરી, જાયનગ

Subject

: Environmental Clearance issued for Expansion of Refinery Capacity from 20 MMTPA to 46

MMTPA with Petrochemical Complex to M/s Nayara Energy Limited, Vadinar, Devbhumi

Dwarka, Gujarat.

Reference: Letter no. F. No. J-11011/320/2006-IA - II (I), dated: 05.01.2021.

Dear Sir,

We are pleased to inform you that, M/s Nayara Energy Limited has been accorded Environmental Clearance for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex at Vadinar, Devbhumi Dwarka, Gujarat vide letter referred above.

Please find enclosed herewith copy of the Environmental Clearance letter for the compliance of General Conditions No. 13.1 (VI) as below:

Environmental Clearance General Condition 13.1 (VI)	Nayara Energy Compliance
"A copy of the clearance letter shall be sent by the project proposal." "A copy of the clearance letter shall be sent by the project proposal by the clearance letter shall be sent by the project proposal and the local project proposal by the project proposal proposal."	Urban A copy of the Environment whom Clearance letter is enclosed as

Thanking You,

For Nayara Energy Ltd.

P. R. Dixit

(Head - HSEF)

Enclosures:

Annexure-1 (Environmental Clearance issued by MoEF&CC for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex to Nayara Energy

Limited)

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) 5th Floor, Jet Airways Godrej BKC, Plot No. C-68, G Block, Bandra Kurla Complex, Bandra East, Mumbai 400051, India

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



Reference No. Nayara Energy/ENV/MoEF&CC/2021/1007 12th January, 2021

To,

Ministry of Environment, Forests and Climate Change,

Regional Office, Kendriya Paryavaran Bhavan,

E-5, Area Colony, Ravi Shankar Nagar, Link Road No. 3

BHOPAL - 462016

Subject: Regarding advertisement of Environmental Clearance in Newspapers.

Reference: Environmental clearance issued for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex to M/s Nayara Energy Limited vide letter no Letter no. F. No. J-11011/320/2006-IA - II (I), dated: 05.01.2021

Dear Sir,

We are pleased to inform you that, M/s Nayara Energy Limited has been accorded Environmental Clearance for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex at Vadinar, Devbhumi Dwarka, Gujarat. The copy of Environmental Clearance is attached herewith as **Annexure-1** for your kind reference.

As per the General Condition no. IX of Environmental Clearance, which states as under:

"The project proponent shall inform the public that the project has been accorded environment clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.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 concerned Regional Office of the Ministry."

Complying with above mentioned condition, we have published advertisement stating grant of Environment Clearance to Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex in two local newspapers (Gujarat Samachar & Times of India) dated



09.01.2021, which are widely circulated in region. Copy of Newspaper advertisement cutting is attached *herewith* as *Annexure-2*.

Request your good self to kindly acknowledge the advertisement published in widely circulated newspapers in this region and consider the General Condition as complied with.

Thanking You,

For Nayara Energy Ltd.

P. R. Dixit

Head HSEF

Enclosures:

- Annexure-1 (Environmental Clearance issued by MoEF&CC for Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petrochemical Complex to Nayara Energy Limited)
- 2) Annexure-2 (Advertisement on Grant of Environment clearance in two widely circulated local newspapers.)



File No. J-11011/320/2006-IA-II(I)

Government of India Ministry of Environment, Forest & Climate Change Impact Assessment Division

Indira Paryavaran Bhawan, Jal Wing, 3rd Floor, Aliganj, Jor Bagh Road, New Delhi-110 003

Dated:05th January, 2021

To,

M/s Nayara Energy Limited, Vadinar, Devbhumi Dist. Dwarka, Gujarat

Sub: Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petro-Chemical Complex, M/s Nayara Energy Limited located at Vadinar, District: Devbhumi Dwarka, Gujarat - Consideration of Environment Clearance

Sir,

This has reference to your online proposal No. IA/GJ/IND2/175608/2018 dated 27th September, 2020 for environmental clearance to the above mentioned project.

The Ministry of Environment, Forest and Climate Change has examined the proposal 2. for environmental clearance to expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petro-Chemical Complex, M/s Nayara Energy Limited located at Vadinar, District:

3. The details of products and capacity are as under:

Product Slate for Existing & Proposed Refinery

Sr. No.	Products	Capacity (KTPA)	
1.	LPG	Existing Refinery (20 MMTPA)	Ultimate Refinery
2.		938	(46 MMTPA)
	Naphtha /MS		785
3	Gasoline	4,200	10 726
_4	SKO/ATF		10,726
5.	Diesel/ HSD	872	624
6.	Furnace Oil/VGO	9,706	22,775
7.	Sulphur	220 .	1 1=
8.		318	
	Petcoke	2,247	1,610
9.	Bitumen		2,191
10.	Ethanoi	377	337
11.	Fuel & Losses		110
	a. Fuel		
Ī	b. Losses	1,009	4,316
	C. Pronylene	111	476
O KTPA	out of these are covered in	-	2,050 *

Product Slate for the Proposed 10.75 MMTPA Petro-chemicals Complex

	Products	Capacity (KTPA)	
Sr. No.	Propylene/Polypropylene (PP)	1000*	
1,		180	
2.	Butadiene	150	
3.	MTBE/ETBE	500	
4.	Benzene ,	1400	
5.	PX	2,400	
6.	РТА	200	
7.	LAB	1050	
8.	Polypropylene	500	
9.	HDPE	550	
10.	LLDPE	200	
11.	LDPE/ EVA	800	
12.	MEG/DEG	500	
13.	SM	200	
14.	Phenol	125	
15.	Acetone ,	35	
16.	Bisphenol -A (BPA)	130	
17.	Polycarbonate	50	
18.	N-Butanol	10	
19.	i- Butanol	10	
20.	2 Ethyl Hexanol	40	
21.	Neo Pentyl Glycol (NPG)	10	
22.	Acrylic acid	300	
23.	Acrylates (Butyl, Methyl, Ethyl)		
24.	SAP	100	
25.	Propylene Oxide (PO)/PG/Polyols	200	

4. Total land area available is 22750000 m² (2275 Ha). Existing refinery is in 11710000 m² (1171 Ha) and proposed expansion will be in 11040000 m² (1104 Ha) area. No additional land will be acquired. Industry has already developed 410 Ha greenbelt areas for existing refinery and will develop 340 Ha for the proposed project; the total green belt area after proposed expansion will be 750 Ha which will be 33 % of total 2275 Ha project area. The estimated project cost of proposed expansion (Refinery plus petro chemical complex) is Rs. estimated project cost of proposed expansion (Refinery plus petro chemical complex) is Rs. 1,30,000 Cr. Total capital cost earmarked towards environmental pollution control measures 1,30,000 Cr. Total capital cost earmarked towards environmental pollution control measures is Rs. 3923 Cr for expansion and the Recurring cost (operation and maintenance) will be about Rs. 30.4 Cr. per annum. Total Employment will be 2000 persons as direct & 12000 – about Rs. 30.4 Cr. per annum. Total Employment will be 2000 persons as direct & 74.58 Cr for next

Some

depending on company's year on year financial performance.

- **5.** Total water requirement of 928 MLD will be met from Sea Water which includes 204 MLD for existing and 724 MLD for proposed expansion project. Effluent of 93 MLD quantity will be treated through effluent treatment plant and entire treated effluent will be utilized for service water, fire water make up, RO feed and horticulture. 536.5 MLD Desalination/RO Reject & 36.5 MLD sea water based cooling tower blow down will be sent for deep sea discharge through diffuser recommended by NIO.
- 6. Power requirement after expansion will be 927 MW including existing 160 MW and will be met from CPP (Captive Power Plant). Existing unit has 27 DG sets of (125 kVA to 2000 kVA) capacity, additional 50 DG sets (125 kVA to 2000 kVA) will be used as standby during power failure. Stack (vary between 6 to 30 m) will be provided as per CPCB norms to the proposed DG sets.
- 7. The project/activity is covered under category A of items 4(a) "Petroleum Refining Industry", 5(c) "Petro-chemical complexes" of the Schedule the Environment Impact Assessment (EIA) Notification, 2006 and requires appraisal at Central Level by the Expert Appraisal Committee (EAC) in the Ministry.
- 8. The project proposal was considered by the Expert Appraisal Committee (Industry-2) in its 38th meeting held during 25-27th June 2018 and recommended Terms of References (ToR) for the Project. The ToR has been issued by Ministry vide letter No. J-11011/320/2006-IA-II(I); dated 03/08/2018.
- **9.** The proposal was considered by the EAC in its 24th meeting held on 19th October, 2020 in the Ministry, wherein the project proponent and their consultant M/s. National Environmental Engineering Research Institute presented made a detailed presentation on the salient features of the project.
- 10. The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with PFR report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the PFR report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- 11. The Committee noted that the EIA/EMP report is in compliance of the ToR issued for the project, reflecting the present environmental concerns and the projected scenario for all the environmental components. The Committee has found the baseline data and incremental GLC due to the proposed project within NAAQ standards. The Committee has also deliberated on the CER plan and found to be addressing the issues in the study area. Certified report on compliance of existing EC conditions also found to be satisfactory. The Committee also found the additional studies and information submitted and presented by the project proponent to be satisfactory. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have recommended for grant of environmental clearance.

Synl

- 12. The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.
- 13. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petro-Chemical Complex, M/s Nayara Energy Limited located at Vadinar, District: Devbhumi Dwarka, Gujarat, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-

A. Specific Conditions:

- (i). The environmental clearance is subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable, as per the Ministry's OM dated 8th August, 2019. Grant of environmental clearance does not necessarily imply that Wildlife Clearance shall be granted to the project and that their proposal for Wildlife Clearance will be considered by the respective authorities on its merit and decision taken.
- (ii). The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (iii). The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (iv). The treated effluent of 536.5 MLD Desalination/RO Reject & 36.5 MLD shall be sent for deep sea discharge through diffuser recommended by NIO.
- (v). The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R.595(E) dated 21st August, 2009 as amended from time to time, shall be followed.
- (vi). Volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.997% with effective chillers/modern technology. For emission control and management, use of FG/NG in heater as fuel, adequate stack height, use of Low NOX burners in heater & boiler, continuous stack monitoring, Sulphur recovery plant, etc. shall be installed/ensured.
- (vii). Total fresh water requirement for the proposed project shall not exceed 724 MLD to be met from Sea water. Necessary permission in this regard shall be obtained from the concerned regulatory authority.
- (viii). Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

Sour

- (IX). Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
- (x). Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xi). Fly ash should be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust should be avoided. The ash from boiler shall be sold to brick manufacturers/cement industry.
- (xii). The company shall undertake waste minimization measures as below:
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xiii). The green belt of 5-10 m width shall be developed in the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. The project proponent shall ensure 33% greenbelt area vis-à-vis the project area through afforestation in the degraded area. The Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xiv). The CER allocation shall be spent mainly for addressing the issues raised during public consultation/hearing including medical, education/skill development, potable water supply, solar lights, village roads, and scholarship for higher education, support to farmers & fishermen with better machinery, fodder for cattle, animal husbandry, and other miscellaneous development works etc., and shall be completed within 5 years. The amount proposed if any in CER shall be spent during execution of the project and shall not be linked with the CSR.
- (xv). For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xvi). The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
- (xvii). Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet.
- (xviii). Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

8142

- (xix). Process safety and risk assessment studies shall be further carried out using advanced, models, and the mitigating measures shall be undertaken/implemented accordingly.
- (xx). The PP should improve the efficiency of ETP Plant and the water discharge should be as per prescribed CPCB Norms. They should also install 24x7 hours monitoring system (of the discharge) and the same should be connected to the server of SCPB/CPCB.

13.1. General conditions:

- (i) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (ii) The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
- (iii) 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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (v) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (vi) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (vii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (viii) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 MoEF&CC by e-mail.

81-1

environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.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 concerned Regional Office of the Ministry.

- (x) 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 start of the project.
- (xi) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- data and false/fabricated submission of 15. Concealing factual data or the conditions mentioned above may comply with of failure to any under the and attract action in withdrawal of this clearance result provisions of Environment (Protection) Act, 1986.
- Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.
- This issues with the approval of the competent authority. 18.

(Ashok Kr. Pateshwary) Director

(2010120H

Copy to: -

The Principal Secretary, Forests & Environment Department, Government of Gujarat, Sachivalaya, 8th Floor, Gandhi Nagar - 382 010 (Gujarat)

The Chief Conservator of Forests (Western Zone), Ministry of Environment & Forests, 2.

Regional Office, E-5, Arera Colony, Link Road -3, Bhopal - 462 016 (MP)

The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office 3. Complex, East Arjun Nagar, Delhi -32

4. The Member Secretary, Gujarat State Pollution Control Board, Paryavaran Bhawan, Sector 10 A, Gandhi Nagar-382 043 (Gujarat)

5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

6. The District Collector, District Dwarka, Gujarat

7. Guard File/Monitoring File/Parivesh portal/Record File

(Ashok Kr. Pateshwary)

Director



Environment Clearance Advertisement:

PUBLICATION NAME: TIMES OF INDIA (English Daily)

CITY : Ahmedabad edition

DATE : 09-01-2021 (Saturday)

PAGE NO. : 08

TITLE: Public Notice for the Environment Clearance granted by MoEF&CC on 05.01.2021 for Expansion of Refinery capacity from 20 MMTPA to 46 MMTPA with petro chemical complex to M/s Nayara Energy Ltd.

PUBLIC NOTICE

This is to bring to the Public Notice that Government of India, Ministry of Environment, Forest and Climate Change has accorded Environment Clearance for the 'Expansion of Refinery Capacity from 20 MMTPA to 46 MMTPA with Petro-Chemical Complex by M/s Nayara Energy Limited located at Vadinar, District: Devbhumi Dwarka, Gujarat with specific and general conditions on date 05.01.2021 under the provisions of EIA Notification, 2006 and amendments/circulars issued thereon.

Copies of Environmental Clearance letter are available with the Gujarat Pollution Control Board and may also be seen at Website of the Ministry of Environment, Forest & Climate Change at https://parivesh.nic.in/.

Head Projects,

Nayara Energy Limited



Environment Clearance Advertisement:

PUBLICATION NAME: Gujarat Samachar (Gujarati Daily)

CITY : Rajkot edition

DATE : 09-01-2021 (Saturday)

PAGE NO. : 11

TITLE: Public Notice for the Environment Clearance granted by MoEF&CC on 05.01.2021 for Expansion of Refinery capacity from 20 MMTPA to 46 MMTPA with petro chemical complex to M/s Nayara Energy Ltd.

જાહેર નોટિસ

આથી જાહેર જનતા ના ધ્યાને લાવવા માં આવે છે કે, ભારત સરકાર, પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલયે ઇ.આઇ.એ. સ્યન, 2006 અને તેમાં જારી સુધારા / પરિપત્રોની જોગવાઈ ઓ હેઠળ વાડીનાર, દેવભૂમિ દ્વારકા સ્થિત મેસર્સ નયારા એનર્જી લિમિટેડ દ્વારા પેટ્રો-કેમિકલ કોમ્પ્લેક્સ સાથે રિફાઇનરી ક્ષમતા 20 એમએમટીપીએ થી 46 એમએમટીપીએ સુધીના વિસ્તરણ પ્રોજેક્ટને વિશિષ્ટ અને સામાન્ય શરતો સાથે તા. ૦૫/૦૧/૨૦૨૧ ના રોજ પર્યાવરણીય મંજૂરી આપી દીધી છે.

પર્યાવરણીય મંજૂરી પત્ર ની નકલો ગુજરાત પ્રદૂષણ નિયંત્રણ બોર્ડ પાસે ઉપલબ્ધ છે અને પર્યાવરણ, વન અને આબોહવા પરિવર્તન મંત્રાલયની વેબસાઇટ https://parivesh.nic.in/ પર પણ જોઇ શકાય છે.

> હેડ પ્રોજેક્ટ્સ, નયારા એનર્જી લિમિટેડ

Letter No: PCCFMNPJ/0025/01/2025 Approved Date: 08-01-2025



મુખ્ય વન સંરક્ષકશ્રીની કચેરી, મરીન નેશનલ પાકે, 'વન સંકુલ', નાગનાથ ગેઈટ પાસે,

ઈન્દિરા માર્ગ, જામનગર-૩૬૧૦૦૧. ફોન નં. : ૦૨૮૮-૨૬૭૯૩૫૭ E-mail : ccf-mnp-jam@gujarat.gov.in, <u>dcf-mnp-jam@gujarat.gov.in</u>



ਮਰੀ, Nayara Energy Limited,

Khambhaliya Post, P.O. Box 24,

Khambhaliya, Dist. Devbhumi Dwarka

વિષય:- MISHTI Programme हेठળ એર વાવેતરની કામગીરી બાબત.

મહાશયશ્રી,

જય ભારત સાથ ઉપરોકત વિષય અન્વયે જણાવવાનું કે MISHTI Programme (Mangrove Initiative for Shoreline Habitats & Tangible Incomes) દેઠળ આપની કંપની દ્વારા ગુજરાત વન વિભાગ સાથે વર્ષ ૨૦૨૪-૨૫થી ૫ (પાંચ) વર્ષ માં કુલ ૧૦૦૦ દે. માં ચેર વાવેતરની કામગીરી કરવા માટે MoU કરવામાં આવેલ છે. સદરહું MoU અનુસાર ચાલુ વર્ષ ૨૦૨૪-૨૫માં ૨૦૦ દે. માં ચેર વાવેતરની કામગીરી કરવાનું નિયત કરવામાં આવેલ અને તે મુજબ આપના દ્વારા સદર કામગીરી માટે જરૂરી રકમ રૂ!. ૭૫,૪૯,૬૦૦/- અત્રેની કચેરીએ જમા કરાવવામાં આવેલ છે. સદર વિગત અન્વયે અત્રેના વિભાગ દ્વારા આ ચેર વાવેતરની કામગીરી કરવામાં આવેલ છે જેની સ્થળ વાર યાદી નીચે મુજબ છે.

जं.	रेन्श्रनुं नाभ	યોજનાનું નામ	મોડલનું નામ	સ્થળનું નામ	વિસ્તાર (હે.)
٩	જામવગર	MISHTI Programme	રેઈઝડબેડ	છજ્ઞ। સબ ક્રિક	90.00
ચ	જામનગર	MISHTI Programme	રેઈઝડબેડ	રમણ સબ ક્રિક	90.00
3	જામવગર	MISHTI Programme	રેઈઝડબેડ	ખીજડીયા વોચ ટાવર નં. ૩ સામે	90.00
8	જોડીયા	MISHTI Programme	રેઈઝડબેડ	સુમારથળી	૨૦.૦૦
ч	જોડીયા	MISHTI Programme	રેઈઝડબેડ	બાવરથળી-૧	૨૦.૦૦
9	જોડીયા	MISHTI Programme	રેઈઝડબેડ	બાવરથળી-ચ	২০.০০
Q	ખંભાળીયા	MISHTI Programme	રેઈઝડબેડ	કન્વેચર બેલ્ટ	રપ.૦૦
۷	ખંભાળીયા	MISHTI Programme	રેઈઝડબેડ	ચોવીસનાલા નાર અને આંબલા વિસ્તાર	૨૫.૦૦
e	ભાટીયા	MISHTI Programme	રેઈઝડબેડ	રોજીધાર થી પશ્ચીમ બાજુ આસોટા નાર તરફ	90.00
इ ल					

દરિયાઈ જીવશ્રુષ્ટિમાં ચેરના વુક્ષો ખુબજ અગત્યનું સ્થાન ધરાવે છે. જેથી સદરહું કરવામાં આવેલ ચેર વાવેતરની કામગીરીથી દરિયાઈ જીવશ્રુષ્ટિના જતનમાં આપના દ્વારા મહત્વનું યોગદાન આપવામાં આવેલ છે અને તેના થી દરિયાઈ જીવશ્રુષ્ટિના સંરક્ષણ અને સવર્ધનમાં સહભાગી થવાની ભૂમિકા ભજવેલ છે જે દરિયાઈ જીવશ્રુષ્ટિમાં જતનની પહેલ સરાહનીય છે.

નાયબ વન સંરક્ષક મરીન નેશનલ પાર્ક જામનગર

નકલ સાદર રવાના : મુખ્ય વન સંરક્ષકશ્રી, મરીન નેશનલ પાર્ક, જામનગર તરફ જાણ તથા વિદિત થવા સારૂ.





NAYARA ENERGY LIMITED

FINAL REPORT ON

HYDROGEOLOGICAL & HYDROCHEMICAL ASSESSMENT FOR GROUND WATER STATUS IN THE BUFFER AND CORE ZONES OF NAYARA ENERGY LIMITED, VADINAR, DISTRICT DEVBHUMI DWARKA, GUJARAT.

By



GROUND WATER & MINERAL INVESTIGATION CONSULTANCY CENTRE PVT. LTD.

(QCI-NABET ACCREDITED & ISO: 10500 CERTIFIED COMPANY)

JAL NIKETAN, 5-JHA-2, JAWAHAR NAGAR, JAIPUR

Phone nos.: 2650724/2650548. Fax nos.: 91-0141-2650548/2623015.

WEBSITE: www.groundwaterindia.com .000° Email: groundwater.jaipur@gmail.com

MAY-2023