



# UDUPI COCHIN SHIPYARD LIMITED

(Formerly TEBMA Shipyards Limited)  
Malpe Harbour Complex, Malpe,  
Udupi, Karnataka – 576 108, India.  
Tel – 0820 2538604.

## ENQUIRY FOR KSPCB STANDARD MONITORING, TESTING AND ANALYTICAL SERVICES REQUIREMENT AT HANGARKATTE AND MALPE YARD.

UCSL/CC/E/GEN/T-209 Dt: 22<sup>nd</sup> November 2023

Enquiry No. & date	UCSL/CC/E/GEN/T-209, Dt: 22 <sup>nd</sup> November 2023
Name of work	ENQUIRY FOR KSPCB STANDARD MONITORING, TESTING AND ANALYTICAL SERVICES REQUIREMENT AT HANGARKATTE AND MALPE YARD.
Last date & time of receipt of tender	28 <sup>th</sup> November 2023 (Tuesday), 15:30hrs
Date & time of opening of Bid	28 <sup>th</sup> November 2023 (Tuesday), 15:30hrs

### 1. DESCRIPTION OF WORK

- 1.1. This enquiry pertains to the awarding of contract for “KSPCB Standard Monitoring, Testing and Analytical Services Requirement at Hangarkatte and Malpe Yard”.
- 1.2. The work is to be carried out at Udupi Cochin Shipyard Limited (UCSL), Udupi, Karnataka.

### 2. QUALIFICATION CRITERIA

- 2.1. The firm should have NABL approved Laboratory with suitable instruments and MoEF & CC accredited required to perform the work scope. Details of NABL accreditation, instruments & MoEF&CC accreditation have to be submitted along with the offer.
- 2.2. The firm should have prior experience in the executing similar nature of work scope. The firm has to submit the documents which validate the work scope, to prove the experience.
- 2.3. Relevant supporting documents shall be submitted by the contractors for validating the requirements as per (2.1) and (2.2) along with other tender documents.

### 3. SCOPE OF WORK

- 3.1. The work is to be carried at UCSL- for the “KSPCB Standard Monitoring, Testing and Analytical Services Requirement at Hangarkatte and Malpe Yard”
- 3.2. The scope of work for KSPCB Standard Monitoring, Testing and Analytical Services Requirement at Hangarkatte and Malpe Yard is placed at Annexure-I.
- 3.3. Mobilization of Labor/workmanship (skilled/semiskilled/unskilled) required for the work in accordance with the specification's provided by UCSL (After placement of work order) and applicable procedure shall be followed.
- 3.4. Arranging required tools and tackles, etc. required for KSPCB Standard Monitoring, Testing, Analytical Services & certification will be under the scope of the bidder.





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- 3.5. Provision of required PPE and safety appliances to workmen/supervisor will be in bidder scope.
- 3.6. Contractor should submit detailed report and test data to concerned UCSL-officer-in-charge, after inspection.
- 3.7. All the govt formalities in this regard to be taken up by the contractor to obtain necessary permissions, if so is required.
- 3.8. Proper PPE's to be weared while performing the work and entering UCSL yard premises.
- 3.9. The bidder at his own cost should arrange necessary transportation for collection of the samples at stipulated date, time & location from UCSL.

#### 4. METHOD OF AWARDDING CONTRACT

- 4.1. Contract will be concluded with Bidder qualifying technically, agreeing to Techno Commercial conditions and emerging as L1 based on the total contract value.
- 4.2. The period of contract shall be for a maximum period One year.
- 4.3. UCSL reserves the right to cancel the tender if required.

#### 5. SCOPE OF UCSL

- 5.1. Electricity and lighting shall be provided.
- 5.2. Required space for storage of materials inside the Yard, as necessary for the work.

#### 6. SCHEDULE OF COMPLETION

- 6.1. Work must be completed within the scheduled time period, as per the instruction of officer-in-charge.
- 6.2. The work as per nature to be carried on monthly basis.

#### 7. VALIDITY

- 7.1. The offer shall be valid for a period of 1 Year.

#### 8. TAXES & DUTIES

- 8.1. GST shall be applicable extra on the prescribed work from 01.07.2017 onwards. You are requested to furnish the following details in the invoice/Bill.
  - Applicable rate of GST/SAC Code
  - Firms GST Reg. NO.
  - Service accounting code (SAC) as prescribed by statutory authorities.
  - GST Reg. No. of Udupi Cochin Shipyard Limited (29AAACT1281B1ZO).





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## **9. PAYMENT**

- 9.1. Payment shall be made on the actual quantity of work done, and payment will be released within 30 days from the date of submission of the bill with a certificate/essential documents and work completion certificate from the executing UCSL officer.
- 9.2. Invoice shall be submitted with necessary Work completion certificate duly certified by UCSL representative.
- 9.3. Payment will be made by RTGS/NEFT to the account of Agency. The name of the bank, branch, A/C No., IFSC code & other particulars shall be furnished by the Agency in the proforma of UCSL.

## **10. TERMINATION & LIMITATION OF LIABILITY**

- 10.1. This contract may be terminated upon the occurrence of any of the following events
- 10.2. By agreement in writing of the parties hereto;
- 10.3. By the non-defaulting party, upon default by the other party, of any clause of this contract, if not remedied within fifteen (15) days, or such longer time as may be agreed upon by the parties, after receipt of notice thereof in writing from the non-defaulting party;
- 10.4. By the other party, upon either party;
  - i. Making the assignment for the benefit of creditors, being adjudged a bankrupt or becoming insolvent; or
  - ii. Having a reasonable petition filed seeking its' dissolution or liquidation, not stayed or dismissed within sixty (60) days; or
  - iii. Ceasing to do business for any reason.
- 10.5. For fraud and corruption or other unacceptable practices.
- 10.6. Upon expiry or termination of this Contract, neither party shall be discharged from any antecedent obligations or liabilities to the other party under this Contract unless otherwise agreed in writing.
- 10.7. UCSL may by notice in writing to Agency to terminate the order after issuing due notice i.e., 30 days' notice period. UCSL shall be entitled to compensation for loss limited to the order value.
- 10.8. Liability maximum that can be claimed by the Agency shall be limited to what is due to be and has been paid by UCSL for work done as per the payment milestones and limited to work order value.

## **11. ARBITRATION & JURISDICTION**

- 11.1. Any disputes arising during the period of the contract shall, in the first instance be settled by mutual discussions and negotiations. The results of such resolution of dispute shall be incorporated as an amendment to the contract, failing which supplier shall approach the UCSL Grievance Redressal Committee as per relevant clause of the Contract.
- 11.2. If any dispute, disagreement or question arising out of or relating to or in consequence of the contract, or to its fulfillment, or the validity of enforcement thereof, cannot be settled mutually or the settlement of which is not herein specifically provided for, then the dispute shall within thirty days from the date either party informs the other in writing that such disputes, disagreement exists, be referred to arbitration. The arbitrators shall be appointed and the arbitration proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act, 1996 (No. 26 of 1996) as amended from time to time and the decision of the Arbitrators shall be final and binding on the parties hereto. The arbitration will





be done by a Board comprising one arbitrator nominated by each party, and a mutually agreed Umpire. Each party shall bear its own cost of preparing and presenting its case. The cost of arbitration shall be shared equally by the parties unless the award provides otherwise. Performance under this Contract shall however, continue during arbitration proceedings and no payment due or payable by the parties hereto shall be withheld unless any such payment is or forms a part of the subject matter of arbitration proceedings.

- 11.3. Seat & Venue of Arbitration: The seat & venue of arbitration shall be at Bangalore.
- 11.4. Language of Arbitration: The Language of arbitration shall be English.
- 11.5. Governing Law: The contract shall be governed by Indian Law.
- 11.6. In case of disputes, the same will be subjected to the jurisdiction of courts at Bangalore, Karnataka.

## **12. SUB CONTRACTING AND ASSIGNMENT**

- 12.1. Contractor shall not assign nor transfer the Purchase Order/ Work Order nor shall any share or interest therein in any manner or degree be transferred or assigned by Contractor to a third party without prior consent in writing of UCSL.
- 12.2. Contractor shall not contract with any subcontractor and/or vendor without the prior written consent of UCSL. Such consent shall not relieve the Contractor from any of his responsibilities and liabilities under the Purchase Order/ Work Order. In addition, Contractor shall ensure that the terms and conditions of any such contract shall comply with and correspond to the terms and conditions of the Purchase Order/ Work Order.

## **13. LABOUR LAWS AND REGULATIONS**

- 13.1. The Agency shall undertake and execute the work with contract Labor only after taking license from the appropriate authority under the Contract Labor (Regulation & Abolition) Act 1970.
- 13.2. The Agency shall observe and comply with the provisions of all labour and industrial laws and enactments and shall comply with and implement the provisions of the Factories Act, 1948, Employees Provident Funds & Miscellaneous Provisions Act, 1952, Employees State Insurance Act, Payment of Gratuity Act, minimum Wages Act, Payment of Bonus Act, Contract Labour (Regulation and Abolition) Act and all other enactments as are applicable to him and his workmen employed by him. The Agency shall inform UCSL his license number from the Central Labour Commissioner.
- 13.3. All Persons, except those exempted under the respective Acts, shall necessarily be insured under the ESI scheme and be made members of the EPF Scheme from the day of their engagement as personnel in the Company. In Case 1, All such insured Persons should carry with them their ESI Identity Card for verification by the authorities. No Persons without a valid ESI Identity Card for verification by the authorities will be permitted to work in the company.
- 13.4. The Agency shall submit the Labour Reports/Returns as required by the Company from time to time in respect of their workmen in standard format to the concerned contracting officer so as to enable the same to reach Contract cell by the 5th of every month. Delayed submission of the same shall attract penal interest /damages at the rate as levied by the respective authorities under the relevant Acts.
- 13.5. The Agency shall maintain the records viz. Muster Roll, Acquittance Roll with full details, Account books etc., in original. These are required for inspection by the concerned authorities under each scheme.





- 13.6. If the Agency fails to pay any contributions, charges or other amounts payable under any of the aforementioned provisions of law, UCSL shall deduct or adjust amounts equivalent to such contribution, charges or amounts from amount payable to him by UCSL, including any deposit or amounts payable against bills and make payments on his account to the appropriate authority. He shall not be entitled to question or challenge such deductions, adjustments or payment made by UCSL.
- 13.7. Any other amount payable under any law or in respect of any person employed by the Agency, if not paid by him, shall be deducted or adjusted by UCSL out of any amount payable to the Agency including any Security Receipt and paid ever or withheld for payment by UCSL.
- 13.8. The Agency shall be fully responsible for the conduct and discipline of the workmen employed by him in the Company premises. If such workmen commit any misconduct or criminal act inside the Company, the Agency shall take appropriate action against such workmen. The Agency shall abide by the instructions/ guidelines issued by the Company for maintenance of discipline and good conduct among the workmen employed by him.
- 13.9. All persons who are engaged for various works in UCSL either directly or through Agency/contractors, should produce the following documents prior to issuing their entry passes:
- 13.10. Passport/Aadhaar attested copy of passport with photo and address particulars.  
OR  
Police clearance certificate with photo and address particulars. (Police clearance certificate to the effect that the concerned person is staying in the area of jurisdiction of the certificate issuing Police Station and that the person is not involved in any criminal offences as per the records available therein.)
- 13.11. Application and Declaration for enrolling under Employees Provident Fund and ESI Scheme- 3 individual passport size photographs and two copies of family photographs of the members.
- 13.12. Agency shall familiarize themselves with the labour rules & regulations.

#### **14. SECRECY & RESTRICTION ON INFORMATION TO MEDIA**

- 14.1. The information contained in the enquiry as such shall NOT be communicated to any third party without prior approval of UCSL.
- 14.2. Information in respect of contracts/orders shall NOT be released to the national or international media or anyone not directly involved in its execution without the written approval of UCSL.

#### **15. CANCELLATION OF ORDER AND RISK CONTRACTING**

- 15.1. In the event the contractor fails to complete the work promptly and satisfactorily as per the terms of the order, and if the work is delayed beyond thirty (30) days from the agreed schedule, UCSL, without prejudice, reserves the right to cancel the order and get the work done at contractor's cost and the expenditure so incurred including any damage or loss will be recovered from him and the Security Deposit furnished by him is liable to be forfeited either in whole or in part.

#### **16. FORCE MAJEURE**

- 16.1. Should failure in performance of any part of this contract arise from war, insurrection, restraint imposed by Government act or legislation of other statutory authority, from explosion, riot, legal lock-out, flood, fire, act of God or any inevitable or unforeseen event beyond human control which will be construed as a reasonable ground for extension of time, UCSL may allow such additional time as is mutually agreed to be justified by the circumstances of the case.





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### **17. SAFETY OF PERSONNEL AND FIRST AID**

- 17.1. The Agency shall be entirely responsible for the safety of all the personnel employed by him on the work. In this regard, he may adopt all the required safety measures and strictly comply with the safety regulations in force. In this regard, the Contractor will have to fully indemnify UCSL against any claims made by his workmen/other personnel.
- 17.2. The Agency may arrange to suitably insure all his workmen/ other personnel in this regard. UCSL will not be responsible for any injury or illness to the Contractor's workmen/other personnel during execution of the works due to whatsoever reasons.
- 17.3. The Agency shall provide and maintain so as to be readily accessible during all working hours, a first aid box with prescribed contents at every place where he employs contract labor for executing the works.

### **18. OVERWRITING & CORRECTIONS**

- 18.1. Tenders shall be free from overwriting or erasures. Corrections and additions, if any, shall be duly attested and a separate list of such corrections shall be attached with the offer

### **19. OTHER TERMS & CONDITIONS**

- 19.1. Quality of workmanship shall conform to the specification/ standards laid down by UCSL.
- 19.2. UCSL reserves the right to accept / reject any offer.
- 19.3. Damages caused to the Shipyard properties/tools/accessories should be rectified by the Contractor at his cost or proportional recoveries will be made from the contractor while passing their bills for payment.
- 19.4. The Agency shall have to engage workforce on round the clock basis and also on Sundays and holidays, if required.
- 19.5. Work has to be completed to the satisfaction of Udupi Cochin Shipyard Ltd.; Engineers deputed for the job. The job should be completed at the time specified by the supervising Engineer for each stage of work.
- 19.6. The Contractor shall indemnify UCSL or its officers against any claims arising out of accidents or injuries to workmen or other persons or damage to other property which may arise during the execution of the contract or from breach of any Law or Regulation prior to delivery and acceptance of the items at UCSL.
- 19.7. It is also to be understood by the Contractor that Udupi Cochin Shipyard Limited does not bind itself to give the Contractor any regular or specific quantity or area of work and it shall be done at the sole discretion of UCSL depending on the prevailing site conditions and other limiting factors and no claim on this account from the contractor shall be entertained.
- 19.8. The Contractor shall also be governed by the General Conditions of Contract of UCSL, General Safety Rules and other relevant labour laws.
- 19.9. Assistant General Manager or his authorized representative will be the Officer-in-charge of this Contract.

Asst. General Manager (Material & Contract Cell)



**सरुन बाबू ई बि**  
**SARUN BABU E B**  
सहायक प्रबंधक/ASSISTANT MANAGER  
उडुपि कोचीन शिपयार्ड लिमिटेड  
**UDUPI COCHIN SHIPYARD LIMITED**  
माल्पे, कर्नाटक/MALPE, KARNATAKA-576 108



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## 20. PRICE BID FORMAT

SL NO	Description of work	Tentative QTY for One Years	UOM	UNIT PRICE	TOTAL AMOUNT
<b>Hangarkatte Yard</b>					
<b>Yearly</b>					
1	DG Chimney Stack Emission (500Kva -2 Nos)	24	EA		
2	Drinking Water Monitoring	12	EA		
3	Noise Level	48	EA		
4	Ambient Air monitoring -3 places	48	EA		
5	Transportation and Kit mobilization	12	EA		
<b>Malpe yard</b>					
<b>Yearly</b>					
6	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	48	EA		
7	Drinking Water Monitoring	12	EA		
8	STP Treated Water	12	EA		
9	Noise Level	48	EA		
10	Ambient Air monitoring - 4 places	48	EA		
11	Blasting Chamber Exhaust Checking	24	EA		
12	Transportation and Kit mobilization	12	EA		
13	<b>Total basic price</b>				
14	<b>Taxes applicable</b>				
15	<b>Total price inclusive of all taxes and other charges</b>				

Note: L1 will be determined based on the Total amount Sl. No:15

Signature:

Address of the contractor:

Date:

Seal:

20.1. Prices are to be quoted in the Pricing Format. The quotations to be submitted in the company letter head and forwarded to [contractcell@udupicsl.com](mailto:contractcell@udupicsl.com)

20.2. Quotations shall be submitted as Password Protected File. The bidders are advised to share the password through only SMS while opening the quotations.





**TENTATIVE LIST OF WORK SCOPE FOR**  
**KSPCB STANDARD MONITORING, TESTING AND ANALYTICAL SERVICES**  
**REQUIREMENT AT HANGARKATTE AND MALPE YARD**

SL NO	Description of work	Tentative QTY per month	Tentative QTY for One Years
<b>Hangarkatte Yard</b>			
<b>Yearly</b>			
1	DG Chimney Stack Emission (500Kva -2 Nos)	2	24
2	Drinking Water Monitoring	1	12
3	Transportation and Kit mobilization	1	12
4	Noise Level - 4 places	4	48
5	Ambient Air monitoring - 4 places	4	48
<b>Malpe yard</b>			
<b>Yearly</b>			
6	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	4	48
7	Drinking Water Monitoring	1	12
8	STP Treated Water	1	12
9	Transportation and Kit mobilization	1	12
10	Noise Level - 4 places	4	48
11	Ambient Air monitoring - 4 places	4	48
12	Blasting Chamber Exhaust Checking	2	24





### INDICATIVE QUANTUM OF PARAMETERS

SL NO	WORK SCOPE DETAILS	Parameters to Monitor	UNIT	LOCATION	MONITORING FREQUENCY
1	DG Chimney Stack Emission (500Kva -2 Nos)	PM	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
2	DG Chimney Stack Emission (500Kva -2 Nos)	SO <sub>2</sub>	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
3	DG Chimney Stack Emission (500Kva -2 Nos)	NO <sub>x</sub>	µg /m <sup>3</sup>	Hangarkatte Yard	Monthly
4	DG Chimney Stack Emission (500Kva -2 Nos)	CO <sub>2</sub>	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
5	DG Chimney Stack Emission (500Kva -2 Nos)	CO	mg/m <sup>3</sup>	Hangarkatte Yard	Monthly
6	DG Chimney Stack Emission (500Kva -2 Nos)	O <sub>2</sub>	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
7	DG Chimney Stack Emission (500Kva -2 Nos)	NMHC	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
8	DG Chimney Stack Emission (500Kva -2 Nos)	Total VOCs	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
9	Drinking Water Monitoring	Colour	Hazen	Hangarkatte Yard	Monthly
10	Drinking Water Monitoring	pH at 25 °C	-	Hangarkatte Yard	Monthly
11	Drinking Water Monitoring	Odour	-	Hangarkatte Yard	Monthly
12	Drinking Water Monitoring	Turbidity	NTU	Hangarkatte Yard	Monthly
13	Drinking Water Monitoring	TDS	mg/L	Hangarkatte Yard	Monthly
14	Drinking Water Monitoring	Alkalinity as CaCO <sub>3</sub>	mg/L	Hangarkatte Yard	Monthly
15	Drinking Water Monitoring	Total Hardness	mg/L	Hangarkatte Yard	Monthly
16	Drinking Water Monitoring	Calcium as Ca	mg/L	Hangarkatte Yard	Monthly
17	Drinking Water Monitoring	Magnesium as Mg	mg/L	Hangarkatte Yard	Monthly
18	Drinking Water Monitoring	Iron as Fe	mg/L	Hangarkatte Yard	Monthly
19	Drinking Water Monitoring	Sulphate as SO <sub>4</sub>	mg/L	Hangarkatte Yard	Monthly
20	Drinking Water Monitoring	Chloride as Cl	mg/L	Hangarkatte Yard	Monthly
21	Drinking Water Monitoring	Boron as B	mg/L	Hangarkatte Yard	Monthly





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22	Drinking Water Monitoring	Residual free chlorine	mg/L	Hangarkatte Yard	Monthly
23	Drinking Water Monitoring	Fluoride	mg/L	Hangarkatte Yard	Monthly
24	Drinking Water Monitoring	Phenolic Compounds	mg/L	Hangarkatte Yard	Monthly
25	Drinking Water Monitoring	Manganese as Mn	mg/L	Hangarkatte Yard	Monthly
26	Drinking Water Monitoring	Zinc as Zn	mg/L	Hangarkatte Yard	Monthly
27	Drinking Water Monitoring	Arsenic as As	mg/L	Hangarkatte Yard	Monthly
28	Drinking Water Monitoring	Cyanide as CN	mg/L	Hangarkatte Yard	Monthly
29	Drinking Water Monitoring	Cadmium as Cd	mg/L	Hangarkatte Yard	Monthly
30	Drinking Water Monitoring	Chromium as Cr	mg/L	Hangarkatte Yard	Monthly
31	Drinking Water Monitoring	Aluminium	mg/L	Hangarkatte Yard	Monthly
32	Drinking Water Monitoring	Selenium as Se	mg/L	Hangarkatte Yard	Monthly
33	Drinking Water Monitoring	Lead as Pb	mg/L	Hangarkatte Yard	Monthly
34	Drinking Water Monitoring	Mercury as Hg	mg/L	Hangarkatte Yard	Monthly
35	Drinking Water Monitoring	Nitrate Nitrogen NO <sub>3</sub>	mg/L	Hangarkatte Yard	Monthly
36	Drinking Water Monitoring	E.coli	Per 100 mL	Hangarkatte Yard	Monthly
37	Drinking Water Monitoring	Faecal coliforms	Per 100 mL	Hangarkatte Yard	Monthly
38	Noise Level	Noise level	dba Leq	Hangarkatte Yard	Monthly
39	Ambient Air monitoring	Particulate Matter 10 µm	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
40	Ambient Air monitoring	Particulate Matter 2.5 µm	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
41	Ambient Air monitoring	Sulphur Dioxide	µg /m <sup>3</sup>	Hangarkatte Yard	Monthly
42	Ambient Air monitoring	Nitrogen Dioxide	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
43	Ambient Air monitoring	Carbon Monoxide	mg/m <sup>3</sup>	Hangarkatte Yard	Monthly
44	Ambient Air monitoring	Lead	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
45	Ambient Air monitoring	Ozone	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
46	Ambient Air monitoring	Ammonia	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
47	Ambient Air monitoring	Nickel	ng/m <sup>3</sup>	Hangarkatte Yard	Monthly





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48	Ambient Air monitoring	Benzene	µg/m <sup>3</sup>	Hangarkatte Yard	Monthly
49	Ambient Air monitoring	Benzo (α) pyrene	ng/m <sup>3</sup>	Hangarkatte Yard	Monthly
50	Ambient Air monitoring	Arsenic	ng/m <sup>3</sup>	Hangarkatte Yard	Monthly
51	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	PM	µg/m <sup>3</sup>	Malpe yard	Monthly
52	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	SO <sub>2</sub>	µg/m <sup>3</sup>	Malpe yard	Monthly
53	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	NO <sub>x</sub>	µg /m <sup>3</sup>	Malpe yard	Monthly
54	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	CO <sub>2</sub>	µg/m <sup>3</sup>	Malpe yard	Monthly
55	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	CO	mg/m <sup>3</sup>	Malpe yard	Monthly
56	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	O <sub>2</sub>	µg/m <sup>3</sup>	Malpe yard	Monthly
57	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	NMHC	µg/m <sup>3</sup>	Malpe yard	Monthly
58	DG Chimney Stack Emission (100,320 & 500Kva -2 Nos)	Total VOCs	µg/m <sup>3</sup>	Malpe yard	Monthly
59	Drinking Water Monitoring	Colour	Hazen	Malpe yard	Monthly
60	Drinking Water Monitoring	pH at 25 °C	-	Malpe yard	Monthly
61	Drinking Water Monitoring	Odour	-	Malpe yard	Monthly
62	Drinking Water Monitoring	Turbidity	NTU	Malpe yard	Monthly
63	Drinking Water Monitoring	TDS	mg/L	Malpe yard	Monthly
64	Drinking Water Monitoring	Alkalinity as CaCO <sub>3</sub>	mg/L	Malpe yard	Monthly
65	Drinking Water Monitoring	Total Hardness	mg/L	Malpe yard	Monthly
66	Drinking Water Monitoring	Calcium as Ca	mg/L	Malpe yard	Monthly
67	Drinking Water Monitoring	Magnesium as Mg	mg/L	Malpe yard	Monthly
68	Drinking Water Monitoring	Iron as Fe	mg/L	Malpe yard	Monthly
69	Drinking Water Monitoring	Sulphate as SO <sub>4</sub>	mg/L	Malpe yard	Monthly
70	Drinking Water Monitoring	Chloride as Cl	mg/L	Malpe yard	Monthly
71	Drinking Water Monitoring	Boron as B	mg/L	Malpe yard	Monthly
72	Drinking Water Monitoring	Residual free chlorine	mg/L	Malpe yard	Monthly
73	Drinking Water Monitoring	Fluoride	mg/L	Malpe yard	Monthly
74	Drinking Water Monitoring	Phenolic Compounds	mg/L	Malpe yard	Monthly
75	Drinking Water Monitoring	Manganese as Mn	mg/L	Malpe yard	Monthly
76	Drinking Water Monitoring	Zinc as Zn	mg/L	Malpe yard	Monthly
77	Drinking Water Monitoring	Arsenic as As	mg/L	Malpe yard	Monthly
78	Drinking Water Monitoring	Cyanide as CN	mg/L	Malpe yard	Monthly
79	Drinking Water Monitoring	Cadmium as Cd	mg/L	Malpe yard	Monthly





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80	Drinking Water Monitoring	Chromium as Cr	mg/L	Malpe yard	Monthly
81	Drinking Water Monitoring	Aluminium	mg/L	Malpe yard	Monthly
82	Drinking Water Monitoring	Selenium as Se	mg/L	Malpe yard	Monthly
83	Drinking Water Monitoring	Lead as Pb	mg/L	Malpe yard	Monthly
84	Drinking Water Monitoring	Mercury as Hg	mg/L	Malpe yard	Monthly
85	Drinking Water Monitoring	Nitrate Nitrogen NO <sub>3</sub>	mg/L	Malpe yard	Monthly
86	Drinking Water Monitoring	E. coli	Per 100 mL	Malpe yard	Monthly
87	Drinking Water Monitoring	Faecal coliforms	Per 100 mL	Malpe yard	Monthly
88	Noise Level	Noise level	dba Leq	Malpe yard	Monthly
89	Ambient Air monitoring	Particulate Matter 10 µm	µg/m <sup>3</sup>	Malpe yard	Monthly
90	Ambient Air monitoring	Particulate Matter 2.5 µm	µg/m <sup>3</sup>	Malpe yard	Monthly
91	Ambient Air monitoring	Sulphur Dioxide	µg /m <sup>3</sup>	Malpe yard	Monthly
92	Ambient Air monitoring	Nitrogen Dioxide	µg/m <sup>3</sup>	Malpe yard	Monthly
93	Ambient Air monitoring	Carbon Monoxide	mg/m <sup>3</sup>	Malpe yard	Monthly
94	Ambient Air monitoring	Lead	µg/m <sup>3</sup>	Malpe yard	Monthly
95	Ambient Air monitoring	Ozone	µg/m <sup>3</sup>	Malpe yard	Monthly
96	Ambient Air monitoring	Ammonia	µg/m <sup>3</sup>	Malpe yard	Monthly
97	Ambient Air monitoring	Nickel	ng/m <sup>3</sup>	Malpe yard	Monthly
98	Ambient Air monitoring	Benzene	µg/m <sup>3</sup>	Malpe yard	Monthly
99	Ambient Air monitoring	Benzo (α) pyrene	ng/m <sup>3</sup>	Malpe yard	Monthly
100	Ambient Air monitoring	Arsenic	ng/m <sup>3</sup>	Malpe yard	Monthly
101	STP Treated Water	Ph	6.5-8.5	Malpe yard	Monthly
102	STP Treated Water	BOD5	mg/l	Malpe yard	Monthly
103	STP Treated Water	COD	mg/l	Malpe yard	Monthly
104	STP Treated Water	suspended solids	mg/l	Malpe yard	Monthly
105	STP Treated Water	Ammonical Nitrogen	mg/l	Malpe yard	Monthly
106	STP Treated Water	Total Nitrogen	mg/l	Malpe yard	Monthly
107	STP Treated Water	Faecal coliforms	Per 100 mL	Malpe yard	Monthly
108	Blasting Chamber	Particulate Matter 10 µm	µg/m <sup>3</sup>	Malpe yard	Monthly
109	Blasting Chamber	Particulate Matter 2.5 µm	µg/m <sup>3</sup>	Malpe yard	Monthly

