

REPORT OF THE JOINT COMMITTEE IN COMPLIANCE WITH ORDER DATED 11.05.2022 OF THE HON'BLE NATIONAL GREEN TRIBUNAL (NGT) WESTERN ZONE BENCH PUNE IN THE MATTER OF ORIGINAL APPLICATION (OA) NO. 16 of 2016 (MR. SALU D SOUZA & 2 ANR. VS GOA COASTAL ZONE MANAGEMENT AUTHORITY THROUGH THE MEMBER SECRETARY AND ORS.)

1. BACKGROUND

An Original application (No. 16 of 2016) was filed by Mr. Salu D Souza and 2 others under Sections 14 and 15 of the NGT Act with following prayers:

- a. The Respondents companies (Resp. nos. 7 -13) be directed to remove their vessels which are parked in the river-sometimes in the middle of the river for months at times.
- b. The Respondents companies (Resp. nos. 7 -13) be directed to make arrangements to conduct repair works within the dockyard that have been assigned to them, if at all, by the authorities.
- c. Respondents companies (Resp. nos. 7 -13) be directed to remove all the mud, rust, metals and other foreign material which they have dumped in o the river as this is a violation of pollution laws as well as the CRZ notification.
- d. The GCZMA (Resp. No. 1) be directed to inspect this area and demarcate the encroachments which have been made by the respondent companies in the Cortalim creek and within time frame, these must be removed.
- e. The area of both sides of the Cortalim river be brought to its original condition, as existed, prior to the proliferation of these activities.

The Hon'ble NGT, Special Bench vide order dated 11.05.2022 disposed off the Original Application with following directions:

"Accordingly, dropping of proceedings against the private respondents by CZMA on the ground of pendency of clearances before SEIAA is not justified. Mere pendency of application for CRZ Clearance cannot be treated as permission to continue such activities. The said activities which are not permissible without CRZ clearance are thus directed to be discontinued within three months from today. Private respondents are also liable to pay compensation for past violations on polluter pays principle to be assessed by the GPCB as per law. For remedial action for past violations and restoration, a restoration plan be prepared by a joint Committee comprising MoEF&CC, NCZMA, GCZMA, CPCB, State PCB and National Institute of Oceanography, (NIO) Goa. The GCZMA will the nodal agency for coordination and compliance. The Committee may meet within one month and finalize its plan within two months thereafter, to be duly executed as per directions of the said Committee expeditiously. Removal of encroachment by vessels and restoration plan may be ensured through the concerned authorities, including Police. The Committee may

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function for four months to oversee execution and submit its action taken report to Chief Secretary, Goa. Any cost to be incurred in the process will be borne first by State PCB under the public trust doctrine, to be recovered from the private respondents, as mentioned earlier on polluter pays principle.”

A Copy of the Hon'ble NGT order dated 11.05.2022 is enclosed as **Annexure-1**.

Subsequent to the order of the Hon'ble NGT, the Goa Coastal Zone Management Authority (GCZMA) vide letter dated 20.05.2022 requested MoEF&CC, CPCB, GSPCB and NIO to nominate the members. It is observed that following members were nominated by respective authorities as in June 2022.

- a. Shri. Suresh Kumar Adapa, Scientist 'E', Integrated Regional Office, MoEF&CC, Bengaluru for representing MoEF&CC
- b. Smt. Radha Rao, Expert Member, GCZMA
- c. Shri. J. Chandra Babu, Regional Director, CPCB Regional Directorate, Bengaluru
- d. Shri. Vijay Kansekar, Junior Environmental Engineer, Goa State Pollution Control Board
- e. Dr. Mani Murali, Principal Scientist, National Institute of Oceanography (NIO)

However, no action w.r.t. further course of action was taken by the Nodal Agency i.e., Goa Coastal Zone Management Authority (GCZMA) towards conducting meeting or site visit of the Joint Committee constituted by Hon'ble NGT.

The applicant filed an Execution Application (01/2023) before Hon'ble NGT, Western Zone Bench at Pune in order to seek implementation of directions given by the Tribunal vide its order dated 11.05.2022 in Original Application No. 16/2016(WZ) in the matter of Mr. Salu D'Souza & 2 Anr. Vs. Goa Coastal Zone Management Authority (GCZMA) through its Member Secretary & Ors.

The GCZMA vide email dated 03.07.2023 informed the members that a joint site inspection is scheduled on 10.07.2023 for preparation of remedial action for past violations and restoration, and for preparing a restoration plan as per the order of Hon'ble National Green Tribunal dated 11/05/2022 in OA No 16/2016. Accordingly, the IRO MoEF&CC vide email dated 03.07.2023 requested MoEF&CC to nominate a member from National Coastal Zone Management Authority (NCZMA). The MoEF&CC vide email dated 11.07.2023 nominated Dr. Dinesh Kumar P.K., Chief Scientist (Expert Member NCZMA) to represent NCZMA. The Hon'ble NGT, Western Zone Bench Pune heard the matter on 07.07.2023 and listed the matter for further hearing on 08.09.2023.

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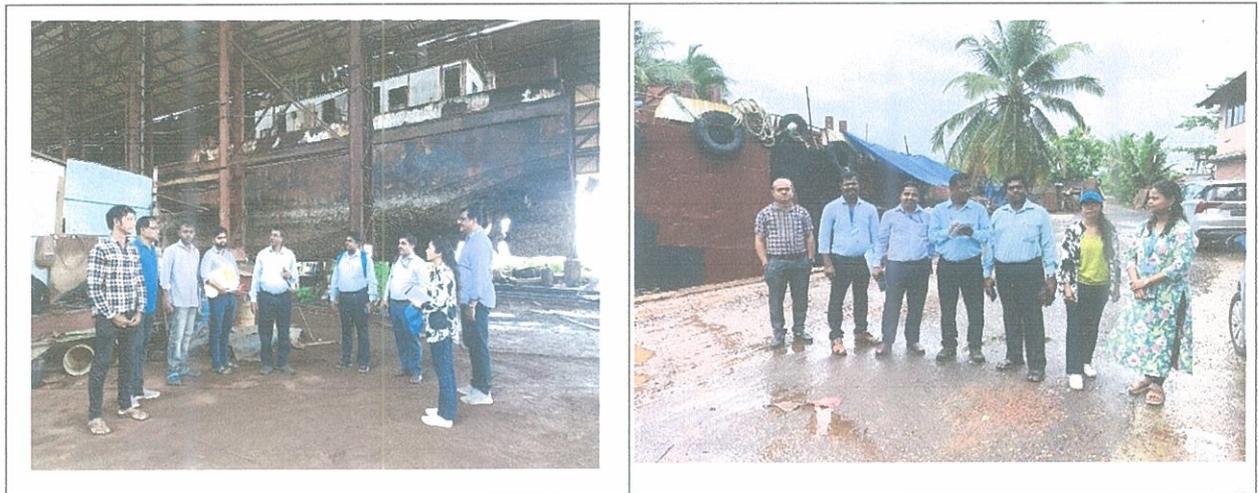
2. Actions taken by the Joint Committee in pursuance of Hon'ble NGT Orders

In pursuance to Hon'ble NGT orders, the Joint Committee held 1st meeting on 10.07.2023 and carried out inspection of the 7 ship /barge repairing units located at Cortalim Creek area. After the site inspection, the Joint Committee held three meetings on 24.07.2023, 31.08.2023 and 06.10.2023. The details of the site inspection and meetings are as follows:

2.1 1st meeting of the Joint Committee along with site inspection on 10.07.2023:

The Joint Committee comprising members from MoEF&CC, CPCB, GSPCB, GCZMA and NIO held a meeting at GCZMA Office on 10.07.2023 to understand the matter. The Advocate Venefreda Breganza, Legal Retainer (GCZMA) briefed the committee members about the OA and directions of Hon'ble NGT in the order dated 11.05.2022. Afterwards, the committee visited the following vessel repair or vessel building units located at Cortalim Creek South Goa:

1. M/s.A.V.Salgaonkar Works
2. M/s.Shaparia Docks and steel Company Ltd
3. M/s Sardessai Engineering
4. M/s.Vipul Shipping Engineering Works
5. M/s Desa Engineering Works
6. M/s Sachita Engineering works
7. M/s Ferromar Shipping Pvt Ltd



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The committee decided to hold a meeting on 24.07.2023 so as to hear the complainant and all the concerned stakeholders in detail.

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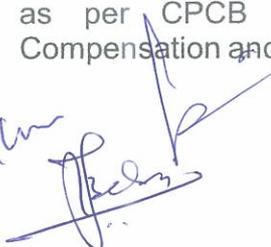
2.2 2nd meeting of the Joint Committee held on 24.07.2023:

The Joint Committee with all its members (including member from NCZMA) attended the meeting on 24.07.2023 and the following were also present during the meeting:

- a. Representative of M/s. A.V. Salgaonkar along with their Advocate
- b. The applicants of OA along with their Advocate
- c. The representatives of M/s. Vipul Shipping Engineering Works & M/s Desa Engineering Works along with their Advocate

It was observed that none of the project representative attended the meeting with detailed presentations w.r.t. the matter, despite the committee informing the project representatives during the site inspection dated 10.07.2023. Hence the committee decided that

- (i) To have uniformity in providing information and to enable to ascertain the quantum of violation for the purpose of imposing penalty and remedial action for restoration in the matter of OA No 16/2016, all the concerned project representatives were requested to submit the following documents, within a week time to GCZMA:
 - Date of Commissioning /Operation
 - Total Area of the Unit with co-ordinates of boundaries with a proof
 - Capacity in terms of vessel repair or vessel building
 - Copies of all statutory approvals (if any) and renewals obtained including from the Captain of Ports since commissioning.
 - Copies of any other approvals obtained from any other concerned State Departments or Central Ministries
 - A copy of Consent to Operate and renewals obtained from GSPCB (from commissioning to till date)
 - Annual number of ships repaired/built and annual turnover from date of commissioning to till date along with income tax returns filed by the Unit.
 - Records pertaining to total quantities of waste generation, and the mode of disposal since commissioning
 - Status of water and sediment quality of Cortalim Creek South Goa
 - Any other relevant information.
- (ii) Committee felt that the vessel repair or vessel building units located at Cortalim Creek South Goa should have closed their operations in compliance to the Hon'ble NGT order passed in the matter, as these units are in operation in violation of the rules.
- (iii) The Committee requested that fisheries department shall provide annual fish catch data for the period 2010 to 2023, by 14.08.2023 to GCZMA.
- (iv) GSPCB to calculate the compensation/penalty to be levied on project proponents as per CPCB report on "Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund" in compliance to Hon'ble NGT

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order dated 11/05/2022 in OA No 16/2016 and also to circulate to all the Committee members prior to the next meeting of the Committee tentatively scheduled on 17.08.2023 (through VC to be organized by GCZMA).

- (v) DSLR, Government of Goa to resurvey the project areas at Cortalim Creek South Goa and to provide latest status report to the Committee.

2.3 3rd meeting of the Joint Committee held on 31.08.2023:

The Joint Committee had a meeting on 31.08.2023 and deliberated on the issues such as DSLR survey report, compensation/penalty calculation, collection and analysis of water samples and restoration plan and decided the following:

- Department of Survey and Land Records (DSLR) will be requested to conduct a resurvey of project areas at Cortalim Creek, South Goa within a week and to submit their latest report with regard to the encroachments if any within a month.
- The water and sediment samples of the Cortalim Creek will be collected jointly by CPCB and GSPCB and analyzed for relevant parameters at the laboratory of RD, CPCB, Bengaluru
- Collection of fish production data from fisheries department
- Estimation of compensation based on the available information

2.4 4th meeting of the Joint Committee held on 06.10.2023:

The Joint Committee held its 4th meeting on 06.10.2023 at GCZMA office. The committee perused the Hon'ble NGT order dated 08.09.2023 and observed that GCZMA is yet to initiate action against the projects under operation in compliance to Hon'ble NGT order. The committee advised the GCZMA to initiate action against the operating projects at Cortalim Creek South Goa in violation of Hon'ble NGT judgement dated 11.05.2022. The Joint Committee also observed that Hon'ble NGT vide its order dated 08.09.2023 also directed GCZMA to file the affidavit within 2 weeks of the order dated 08.09.2023. The Joint Committee suggested GCZMA to file the compliance to status before Hon'ble NGT without any further delay. Action taken report as apprised by concerned organization or department and the decisions taken during the meeting is detailed in subsequent paras.

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The committee deliberated the issue of resurvey of area of the Vessel Repair or Vessel Building projects at Cortalim Creek South Goa by DSLR. It was observed that no representative of DSLR was present in the meeting. However, Mr. Balakrishna Surlakar, Field Surveyor, GCZMA accompanied DSLR team during the field survey. He informed the committee that the survey was carried out from 3rd to 5th October 2023. The DSLR team observed further encroachment in the project of M/s. Desa Engineering Works. M/s. Ferromar Shipping Private Limited did not allow the DSLR team to enter the premises for carrying out the survey. He further submitted that survey report will be submitted to the committee within a period of 10 days.

The representative of Fisheries Department submitted that fish production data is available for the entire Cortalim Creek and information is available only from 2014 to 2023. During the meeting, a copy of the information submitted to GCZMA was submitted to the committee. A copy is enclosed as **Annexure-2**.

The GSPCB informed that 9 samples were collected in the Cortalim Creek in association with Regional Directorate, CPCB, Bengaluru team on 26.09.2023 and the analysis reports will be available within two weeks.

Thereafter, the committee scrutinized the information submitted by 6 project proponents except M/s. Shaparia Docks and Steel Company Limited, with regard to the date of commissioning, date of stoppage of operations, consent validity obtained under Water (Prevention and Control of Pollution) Act, 1974, violation period to be considered, methodology to be followed to impose environmental compensation on the project proponents in compliance to Hon'ble NGT order for violation of provisions of the Water (Prevention and Control of Pollution) Act, 1974. M/s. Desa Engineering Works obtained consent to operate before starting the operations, however violated the CRZ Regulations.

Upon receipt of analysis results of the collected samples and sediments collected on 26.09.2023 from Cortalim Creek areas, both the members representing NIO and NCZMA will provide interpretation of surface water quality and on the sediment analysis reports. The committee decided to propose short term and long-term

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measures required under restoration plan after studying the water and sediment quality reports.

2.4. Legal framework for the operation of Ship/Barge Repair Facility:

Following rules (w.r.t. environment protection) are applicable for the ship/barge repair facilities:

- a) The Water (Prevention & Control of Pollution) Act, 1974
- b) The Air (Prevention & Control of Pollution) Act, 1981
- c) The Environment (Protection) Act, 1986
- d) The Hazardous Waste and Other Waste (Management and Transboundary Movement) Rules, 2016
- e) The E-Waste Management Rules, 2016, as amended
- f) The Plastic Waste Management Rules, 2016, as amended
- g) The Municipal Solid Waste Management Rules, 2016
- h) The Coastal Regulation Zone Notification 1991/2011/2019 (if CZMP 2019 is approved by the Ministry)

The projects shall obtain following clearances/permissions from the statutory authorities:

- a) Consent to Establish from State Pollution Control Board under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981
- b) Consent to Operate from State Pollution Control Board under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981
- c) Authorization from State Pollution Control Board under the Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.
- d) Coastal Regulation Zone (CRZ) Clearance

The project proponent shall comply with the conditions stipulated under consent to establish, consent to operate, authorization and CRZ clearance and submit compliance reports to different statutory authorities as per the regulations.

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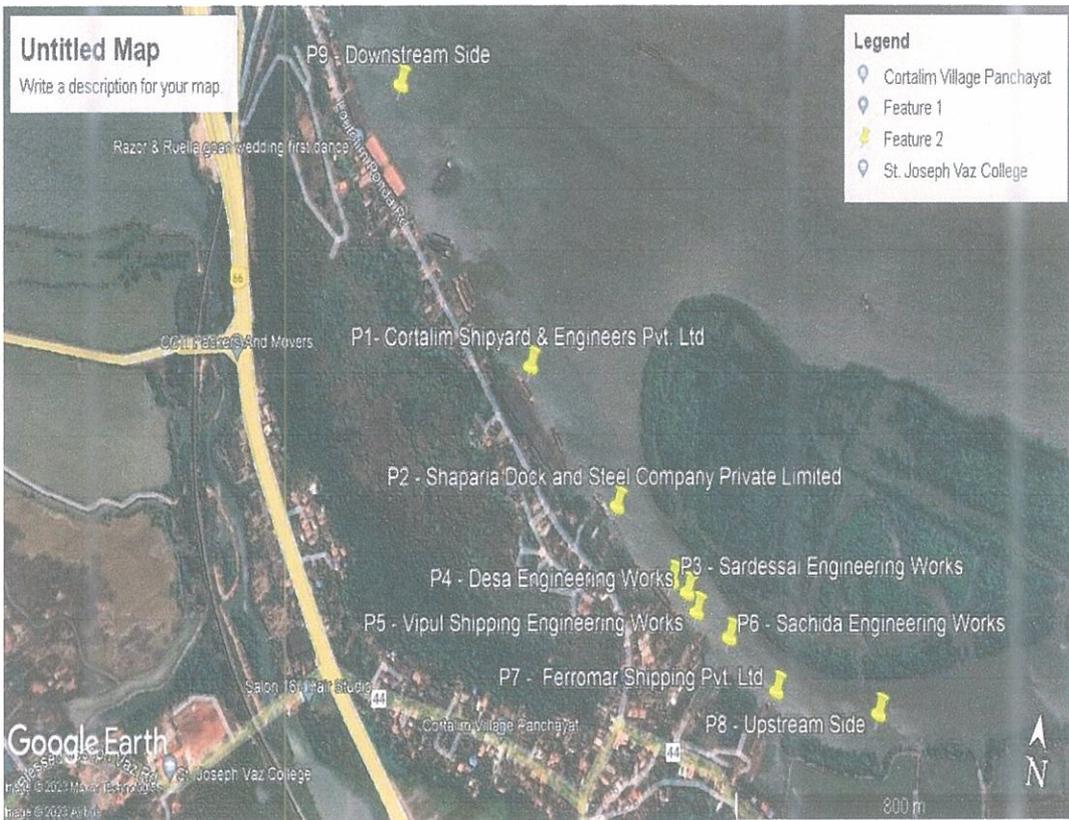
2.5 Findings of Survey of the Vessel Repair or Vessel Building Projects located at Cortalim Creek Area by DSLR:

The DSLR, Government of Goa carried out the resurvey of the Cortalim Creek during 3rd to 5th October 2023. Latest resurvey layout of the project areas is enclosed as **Annexure-3**.

The DSLR representative during the meeting, submitted that there were no encroachments in the 7 projects. However, DSLR observed encroachments in the riverine area.

2.6 Surface water and sediment sample collection at Cortalim Creek South Goa jointly by CPCB & GSPCB and its quality:

The member of the Joint Committee representing CPCB and the Regional Directorate Laboratory, CPCB, Bengaluru along with laboratory officials of GSPCB carried out surface water and sediment samples from Cortalim Creek on 25.09.2023. The location details of surface water and sediments collected from Cortalim Creek on 25.09.2023 by the joint team of CPCB and GSPCB and photographs taken during the sampling are given below:-



Google Map Location of the Cortalim Creek Sampling Points

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Sampling Team at Cortalim Creek



P1 - M/s Cortalim Shipyard & Engineers Private Limited



Sampling at location of P1 - M/s Cortalim Shipyard & Engineers Private Limited

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Sampling at Location of P2 - M/s Shaparia Dock and Steel Company Private Limited



Sampling at Location of P3 - M/s Sardessai Engineering Works

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Location of P3 - M/s Sardesai Engineering Works



Location of P4 - M/s Desa Engineering Works



Location of P4 - M/s Desa Engineering Works

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Sampling at Location of P4 - M/s Desa Engineering Works



Location of P5 - M/s Vipul Shipping Engineering Works

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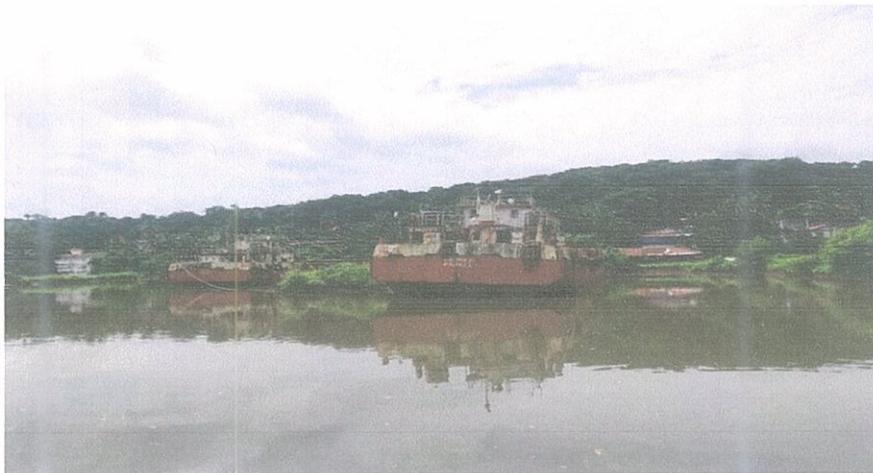
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Location of P6 - M/s Sachida Engineering Works



Sampling at Location of P6 - M/s Sachida Engineering Works



Location of P7 - M/s Ferromar Shipping Private Limited

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Sr. No.	Point	Location	GPS Co-ordinates	Operational Status of the Project	Cortalim Creek Surface Water Analysis Results (General Parameters)						
					pH at 25 °C	Turbidity NTU	BOD 3d, at 27° C mg/L	DO mg/L	O & G mg/L	Faecal Coliform MPN/100 ml	
1	P1	Near M/s. Cortalim Shipyard & Engineers Private Limited	Lat: 15°24'10.11"N & Long: 73°54'51.39"E	Non Operational	7.53	12.8	2.6	6.2	5.2	47	
2	P2	Near M/s. Shaparia Dock and Steel Company Private Limited	Lat: 15°24'3.44"N & Long: 73°54'59.44"E	Operational	7.79	1.3	2.8	5.8	BDL	79	
3	P3	Near M/s. Sardessai Engineering Works	Lat: 15°23'59.97"N & Long: 73°55'4.41"E	Non Operational	7.83	8.2	2.8	5.9	BDL	1100	
4	P4	Near M/s. Desa Engineering Works	Lat: 15°23'59.50"N & Long: 73°55'5.70"E	Operational	7.88	11.3	2.2	5.5	BDL	2200	
5	P5	Near M/s. Vipul Shipping Engineering Works	Lat: 15°23'58.52"N & Long: 73°55'6.62"E	Operational	7.78	6.8	2.1	5.3	BDL	790	
6	P6	Near M/s. Sachida Engineering Works	Lat: 15°23'57.49"N & Long: 73°55'9.38"E	Operational	7.83	10.3	2.1	6.0	BDL	14	
7	P7	Near M/s. Ferromar Shipping Private Limited	Lat: 15°23'55.06"N & Long: 73°55'13.59"E	Non Operational	7.63	43.2	2.5	6.1	BDL	11	
8	P8	Up Stream of the Cortalim Creek	Lat: 15°23'55.03"N & Long: 73°55'21.80"E	-	7.70	8.3	2.1	6.3	BDL	49	
9	P9	Down Stream of the Cortalim Creek	Lat: 15°24'24.12"N & Long: 73°54'38.70"E	-	7.87	8.2	1.8	6.1	BDL	33	

Sr. No.	Point	Location	GPS Co-ordinates	Operational Status of the Project	Cortalim Creek Surface Water Analysis Results (Heavy Metals) in mg/L											
					Cu	Cd	Cr (Total)	Iron	Mn	Ni	Pb	Zn	As	Co		
1	P1	Near M/s. Cortalim Shipyard & Engineers Private Limited	Lat: 15°24'10.11"N & Long: 73°54'51.39"E	Non Operational	BDL	BDL	BDL	0.111	BDL							
2	P2	Near M/s. Shaparia Dock and Steel Company Private Limited	Lat: 15°24'3.44"N & Long: 73°54'59.44"E	Operational	BDL	BDL	BDL	0.161	BDL							
3	P3	Near M/s. Sardessai Engineering Works	Lat: 15°23'59.97"N & Long: 73°55'4.41"E	Non Operational	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	P4	Near M/s. Desa Engineering Works	Lat: 15°23'59.50"N & Long: 73°55'5.70"E	Operational	BDL	BDL	BDL	0.127	BDL							
5	P5	Near M/s. Vipul Shipping Engineering Works	Lat: 15°23'58.52"N & Long: 73°55'6.62"E	Operational	BDL	BDL	BDL	0.356	BDL							
6	P6	Near M/s. Sachida Engineering Works	Lat: 15°23'57.49"N & Long: 73°55'9.38"E	Operational	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
7	P7	Near M/s. Ferromar Shipping Private Limited	Lat: 15°23'55.06"N & Long: 73°55'13.59"E	Non Operational	BDL	BDL	BDL	0.457	BDL							
8	P8	Up Stream of the Cortalim Creek	Lat: 15°23'55.03"N & Long: 73°55'21.80"E	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
9	P9	Down Stream of the Cortalim Creek	Lat: 15°24'24.12"N & Long: 73°54'38.70"E	-	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Note: BDL-0.1 mg/L

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The analysis results of the surface water samples collected from 9 locations reveal that the values are in the order of pH (7.53 to 7.88); Turbidity (6.8 to 43.2 NTU), BOD (1.8 to 2.8 mg/L), DO (5.3 to 6.3 mg/L), O&G (BDL at 8 locations and 5.2 mg/L at one location), FC (11 to 2200 MPN/100 ml). Surface water samples shown BDL values (< 0.1 mg/L -as per the instrument available at RD, CPCB, Bengaluru) at all the locations except for Iron content and same observed in the order of BDL to 0.457 mg/L. The analysis results of the Cortalim Creek water samples analysis results reveal that at all 9 sampling locations over a stretch of about 2.5 KM, the overall basic water quality parameters showed more or less similar water qualities with minor variations. In particular, the low turbidity, substantial D.O. contents and depleted B.O.D. values indicate good condition of seawater along the creek. Very low Oil & Grease residue and less faecal coliform counts in surface water also suggest the same.

Sediment Sample Results:

The analysis results of the sediment samples collected jointly by CPCB and GSPCB is given in the Table below

Sr. No.	Point	Sampling Location	GPS Co-ordinates	Cortalim Creek Sediment Sample Analysis Results					
				pH at 25 ° C	EC at 25 ° C $\mu\text{s}/\text{cm}$	% Organic Carbon	% Organic Matter	% Nitrogen	C/N Ratio
1	P1	Near M/s. Cortalim Shipyard & Engineers Private Limited	Lat: 15°24'10.11"N & Long: 73°54'51.39"E	7.73	12100	7.0	12.0	0.3	23
2	P2	Near M/s. Shaparia Dock and Steel Company Private Limited	Lat: 15°24'3.44"N & Long: 73°54'59.44"E	7.71	15910	6.2	10.7	0.4	16
3	P3	Near M/s. Sardessai Engineering Works	Lat: 15°23'59.97"N & Long: 73°55'4.41"E	7.51	18710	6.0	10.3	0.3	20
4	P4	Near M/s. Desa Engineering Works	Lat: 15°23'59.50"N & Long: 73°55'5.70"E	7.27	24700	6.2	10.6	0.3	21
5	P5	Near M/s. Vipul Shipping Engineering Works	Lat: 15°23'58.52"N & Long: 73°55'6.62"E	7.70	11880	4.7	8.1	0.4	12
6	P6	Near M/s. Sachida Engineering Works	Lat: 15°23'57.49"N & Long: 73°55'9.38"E	7.31	12990	6.2	10.7	0.4	16
7	P7	Near M/s. Ferromar Shipping Private Limited	Lat: 15°23'55.06"N & Long: 73°55'13.59"E	7.80	9130	5.1	8.7	0.4	13
8	P9	Down Stream of the Cortalim Creek	Lat: 15°24'24.12"N & Long: 73°54'38.70"E	7.85	14640	6.9	12.0	0.5	14

The analysis results of the sediment samples collected from 8 locations reveal that the values are in the order of pH (7.27 to 7.85); EC (9130 to 24700 at 25 ° C $\mu\text{s}/\text{cm}$), % Organic Carbon (4.7 to 7.0), % Organic matter (8.10 to 12), % Nitrogen (0.3 to 0.5),

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C/N ratio (12 to 23). Sediments samples not been analysed for heavy metals as heavy metals in surface water samples observed to be less than 0.1 mg/L

2.7. Fish production Data:

The Directorate of Fisheries, Government of Goa vide letter dated 14.08.2023 provided the fish catch data of entire Cortalim Creek. Following table provides the fish catch data of Cortalim Creek during the year 2014 to June 2023. The details of fish catch data for the period from 2014 to 2023 is given in table below:

Year	Quantity in Tonnes
2014	35
2015	64
2016	89
2017	107
2018	60
2019	132
2020	78
2021	32
2022	34
2023 (Till June)	31

Source: Department of Fisheries, Government of Goa

From the above data, it can be concluded that the fish catch increased during the period 2014 to 2019 and fish catch reduced after 2019. However, the fish catch data is for entire Cortalim Creek. Hence, it can not be concluded that the project activities are responsible for the reduction in fish catch.

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3. Committee Observations and Findings:

Based on the visits made, interactions held with the concerned departments, information made available to the Joint Committee by the concerned Departments, following observations were made w.r.t. the directions issued by Hon'ble NGT.

- a) Private respondents are also liable to pay compensation for past violations on polluter pays principle to be assessed by the GSPCB as per prevailing law

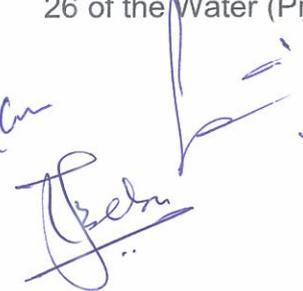
The committee during the site inspection, observed that the Captain of Ports has given permission for operation of the projects. The permissions were issued before 1991 for the projects (except M/s. Desa Engineering Works). As informed by the Captain of Ports and the permission needs to be renewed from time to time. The status of the permissions, violation of applicable rules and regulations by each project is given in the following paragraphs:

i. M/s.A.V.Salgaonkar Works (Currently known as M/s. Cortalim Shipyard & Engineers Pvt. Ltd.)

M/s. A.V. Salgaonkar Works obtained permission for the operation of Barge repairing unit in the year 1965. Details of the permissions obtained by the project is as follows:

- a. Captain of Ports permission vide letter dated 09.06.1965 with validity upto 12.07.1971. No further renewal of the permission was obtained.
- b. Consent to operation and authorization granted by GSPCB vide letter dated 04.08.2020 for the repair of barges (3 no.s/annum). The consent is valid upto 20.05.2030

The representative during the site inspection and in the meeting dated 24.07.2023 informed that, only repair of captive barges was carried out. The repair yard was not utilized for commercial repairs (i.e. repair of other's barges). The operations were stopped in the year 2012. No operations were observed during the site inspection. The project proponent (PP) did not obtain any consent to operate up to 2020, which is a violation under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

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ii. M/s.Shaparia Docks and steel Company Ltd

M/s.Shaparia Docks and steel Company Ltd obtained permission for the operation of the project from Captain of Ports vide letter dated 28.12.1972. As per the Hon'ble NGT order, the unit registered with Office of Labor Inspector in the year 1984. During the site inspection, the project was observed to be in operation. The GSPCB granted consent to operate for the project vide order dated 11.04.2011. PP did not obtain any consent to operate upto 11.04.2011, which is a violation under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

iii. M/s Sardessai Engineering

M/s. Sardessai Engineering obtained permission for the operation of the project from Captain of Ports vide letter dated 09.07.1971. In addition to this, PP obtained consent to operate from GSPCB vide letter dated 14.08.2015 for the repairing of barges (1 barge per month). The validity of consent to operate was up to 10.12.2019. No further renewal was obtained. During the site inspection, it was observed that the unit was not in operation. PP did not obtain any consent to operate up to 2015, which is a violation under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

iv. M/s. Vipul Shipping Engineering Works

M/s. Vipul Shipping Engineering Works obtained permission from Captain of Ports vide letter dated 26.09.1974. The project informed that application for consent to operate was submitted in the year 2014. However, the project did not provide any copy of consent to operate granted by GSPCB. During the site inspection, it was observed that the project is in operation. PP did not obtain any consent to operate, which is a violation under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

v. M/s Sachita Engineering works

M/s Sachita Engineering works obtained permission from Captain of Ports vide letter dated 05.11.1981. The project obtained consent to operate from GSPCB vide order dated 03.06.2015. During the site inspection, the project was not in operation; however, it was noticed that some ship building work was under progress. Cutting of sheets and gas cylinders, etc. were observed at the site. PP did not obtain any consent to operate, which is a violation under Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

vi. M/s Ferromar Shipping Pvt Ltd

M/s. Ferromar Shipping Pvt. Limited vide letter dated 07.08.2023 submitted that the unit commissioned on 01.01.1971. Earlier the project was with M/s. Empreiteiros Gerais Private Limited. The company is merged with M/s. Ferromar Shipping Pvt. Limited vide High Court order dated 16.04.2010. The GSPCB vide letter dated 29.09.1999 granted 1st Consent to Operate for the repair of barges (quantity not mentioned). The consent to operate was valid upto 25.08.2001. GSPCB vide letter dated 22.09.2020 renewed the consent to operate for the repair of barges (quantity not mentioned) with validity upto 28.08.2030. During the site inspection it was observed that the project was not operational, but barges/ships were seen parked along the property during the time of inspection. PP did not obtain any consent to operate, upto 1999. This is a violation Section 26 of the Water (Prevention and Control of Pollution) Act, 1974.

vii. M/s Desa Engineering Works

M/s. Desa Engineering Works obtained permission for setting up new barge repairing activities from Captain of Ports vide order dated 28.08.2008. The GCZMA vide letters dated 30.05.2008 & 01.02.2010 granted NOCs for barge repair activities and construction of dry dock. The GCZMA vide letter dated 08.10.2010 kept both NOCs in abeyance stating that the project deliberately misled the authority by not submitting factual position. The GCZMA vide letter dated 11.04.2011 withdrawn the abeyance letter dated 08.10.2010.

The GCZMA vide letter dated 27.01.2018 forwarded the proposal of NOC for construction of dry dock and barge repair facility to SEIAA, Goa for examining the proposal as it comes under the purview of EIA Notification 2006.

Hence, it is treated that the project is in operation without clearance. The project violated the provisions of CRZ Notification 2011 and still under operation without the CRZ clearance.

b) Compensation for past violations on polluter pays principle to be assessed by the GPCB as per law

As per section 3 of this report, it is observed that the projects no. i to vi violated the Water (Prevention and Control of Pollution) Act, 1974 by operating without valid obtaining consent to operate from the Goa State Pollution Control Board. The project no. vii violated the provisions of CRZ Notification 2011 by starting

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and continuing the operations without obtaining requisite clearance from the competent authority (i.e. Ministry of Environment, Forest & Climate Change).

The penalty for the projects i to vi has been calculated as per CPCB report on "Methodology for Assessing Environmental Compensation and Action Plan to Utilize the Fund"

Environmental Compensation (EC) in Rupees= PI x N x R x S x LF

Where,

PI = Pollution index of the project. The unit falls under Orange category, hence PI = 50

N = Number of days violation took place.

R is a factor in Rupees, which may be a minimum of 100 and maximum of 500. The R value is considered as 250

S = Factor for the scale of operation. The unit being LSI, S=0.5

LF = Location factor, since the population of is more than 1 Million but less than 5 Million, LF=1.25

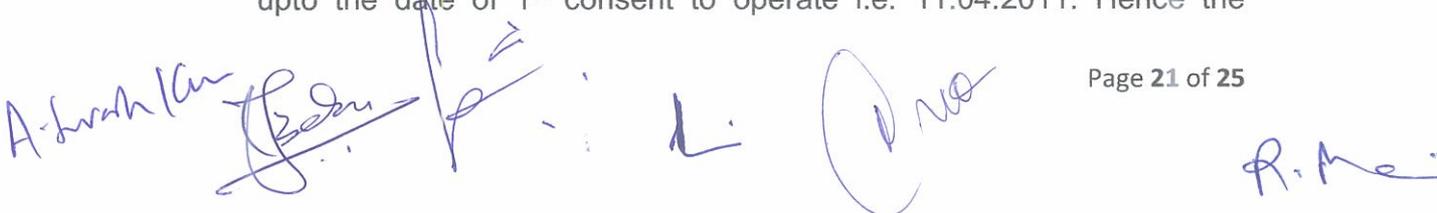
i. M/s.A.V.Salgaonkar Works

The project operated from before 1971 and the water act came into force on 23.03.1974. Hence, the violation may be considered from 23.03.1975 (by giving one year grace period as the project was in existence before 1974). The project operated upto 2012. As exact date is not available, the period of violation is considered upto 01.01.2012. Hence, the number of days of violation will be 13433 days. As per CPCB formula, the estimated environment compensation is as follows:

EC=50X13433X250X0.5X1.25= Rs. 10,49,45,313 (Rupees Ten Crores Forty Nine Lakhs Forty Five Thousand Three Hundred and Thirteen Only)

ii. M/s.Shaparia Docks and steel Company Ltd

The project operated from 1972 and the water act came into force on 23.03.1974. Hence, the violation may be considered from 23.03.1975 (by giving one year grace period as the project was in existence before 1974). The project is in operation. The period of violation is considered upto the date of 1st consent to operate i.e. 11.04.2011. Hence the

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number of days of violation will be 13168 days. As per CPCB formula, the estimated environment compensation is as follows:

EC=50X13168X250X0.5X1.25= Rs. 10,28,75,000 (Rupees Ten Crores Twenty Eight Lakhs Seventy Five Thousand Only)

iii. M/s Sardessai Engineering

The project operated from 1971 and the water act came into force on 23.03.1974. Hence, the violation may be considered from 23.03.1975 (by giving one year grace period as the project was in existence before 1974). The project obtained 1st consent to operate vide order dated 19.08.2015. The number of days of violation is 14759. As per CPCB formula, the estimated environment compensation is as follows:

EC=50X14759X250X0.5X1.25= Rs. 11,53,04,687 (Rupees Eleven Crores Fifty Three Lakhs Four Thousand Six Hundred Eighty Seven Only)

iv. M/s. Vipul Shipping Engineering Works:

The project operated from 1974 and the water act came into force on 23.03.1974. Hence, the violation may be considered from 23.03.1975 (by giving one year grace period as the project was in existence before 1974). The project is in operation. The project did not obtain any consent to operate from GSPCB. The period of violation is considered upto the date of inspection (i.e. 10.07.2023). Hence the number of days of violation will be 17641 days. As per CPCB formula, the estimated environment compensation is as follows:

EC=50X17641X250X0.5X1.25= Rs. 13,78,20,313 (Rupees Thirteen Crores Seventy Eight Lakhs Twenty Thousand Three Hundred and Thirteen Only)

v. M/s Sachita Engineering works

The Captain of Ports granted NoC for the project vide letter dated 05.11.1981. PP in the letter submitted to GCZMA stated that the operations started from 23.10.1980. The project obtained 1st consent to operate from GSPCB vide order dated 03.06.2015. The project is in operation. The period of violation is considered from 23.10.1980 to 02.06.2015. Hence the number of days of violation will be 12640 days. As per CPCB formula, the estimated environment compensation is as follows:

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Based on the water and sediment quality analysis report, it is observed that all 9 samples show low turbidity, substantial D.O. contents, low B.O.D. values y low Oil & Grease, Faecal Coliform in the order of 11 to 220 MPN/100 ml which could be due to discharge of untreated sewage. Also, heavy metals in surface water Cortalim creek area observed as BDL i.e., < 0.1 mg/L This indicates good condition of seawater along the Cortalim Creek. The analysis reports revealed that the quality of the creek is observed to be good, which may be attributed to natural flushing conditions of the estuary. However, a detailed geo-chemical analysis of sediment core is required to ascertain long term environmental impacts if any because of the various activities in the Creek area. The restoration plan may be prepared through reputed Government institute based on the sediment core results.

During 1st and 2nd meetings, the joint committee heard the applicant and requested to provide the documentary evidences about encroachments, contamination, degradation of ecology & fish production. However, till date the applicant had not provided any documentary evidences on the aforesaid aspects.

The committee also observed that few barges are still anchored in the Cortalim creek area. It was also observed that a foreign flagged vessel was under construction in the project area of M/s.Shaparia Docks and steel Company Ltd.

4.0 Conclusions & Recommendations:

Based on the above observations, the committee provides following conclusions and recommendations:

- All the project proponents in the Cortalim creek should stop their operations with immediate effect and allowed to operate only after obtaining of requisite approvals from the concerned departments or Ministries as applicable under the prevailing law.
- The proponents should be allowed to operate only after deposition of EC as proposed by the Joint Committee and after ensuring adequate infrastructure of management of wastes generated, adequate facilities for treatment of effluent/ sewage generated from the project proponents.

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- None of the project proponents are monitoring the surface water and sediments quality in the vicinity of the project area and violating the conditions stipulated by the GSPCB. The proponent shall carry out the monitoring of creek water, sediments as per the frequency stipulated in the consent conditions.
- Goa SPCB may also take up monitoring of marine waters or creek areas in Goa in association with the CSIR-NIO, under National Water Quality Monitoring Programme (NWMP) to ascertain day to day surface water quality status.
- A committee comprising of representatives from GSPCB, GCZMA, Captain of Ports and other stakeholders to be constituted in order to verify the conditions imposed in the approvals once in 3 months. In case of any violations, department concerned shall initiate actions against the violators as per prevailing laws.
- The GSPCB shall levy the penalties as per Hon'ble NGT directions as per recommendations of the joint committee report.
- The GSPCB & GCZMA shall also take appropriate action against other similar projects located in the State of Goa.


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