



From Chairman's Desk

The Goa State Pollution Control Board (GSPCB) was constituted on 1/07/1988 under the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, with a mandate to plan a comprehensive programme for the prevention, control or abatement of water and air pollution in the State of Goa and to secure the execution thereof, and to advise the State Government on any matter concerning the prevention, control or abatement of water and air pollution. The GSPCB has since been growing steadily in terms of infrastructure, manpower as well as expertise, and has

earned a respectable position among the various State Pollution Control Boards in the country. It has established well equipped chemistry and microbiology laboratories with facilities for analysis of pesticides and petroleum hydrocarbons, heavy and trace metals, other general pollutants of water and air and bacteriological contaminants. Apart from performing the statutory duties assigned to it under the Water Act, 1974, and the Air Act, 1981, the GSPCB has also been assigned responsibilities regarding management and handling of Municipal Solid Wastes, Hazardous Wastes, Bio-Medical Wastes, Batteries Wastes, Plastic Wastes, etc. under the Environment Protection Act, 1986.

The year under report has seen an all round progress in the mandated role of the GSPCB. During the year the analytical capabilities of GSPCB laboratory received a major boost with the commissioning of a new GC-MS system on 12/07/2010 at the hands of the Hon. Minister for Environment, Shri. Aleixo Sequeira. A new module - The Hazardous Wastes Module - was introduced in our e-governance system (XGN), facilitating the units generating Hazardous Wastes to submit their applications on-line. A common Consent Application Form for Consent to Operate under the Air Act and the Water Act, and Authorization under Hazardous Wastes Rules, was adopted during the year, thus combining all three applications into one. The GSPCB also decided to grant uniform validity for the Air and Water Consents and Authorization under Hazardous Wastes Rules. This has brought much relief to the industry, which otherwise faced difficulties in keeping track of their timely renewals. The Board completed the Audits of its accounts for the financial years 2003-04, 2004-05 and 2005-06.

The Central Pollution Control Board granted approval for the proposal of GSPCB for setting up regular Ambient Air Quality (AAQ) monitoring stations at 7 additional locations in the mining areas on 50:50 cost sharing basis. These additional 7 locations were proposed by the Board, as the Board was in receipt of several complaints from the local residents, of severe dust pollution resulting from the mining activities. Regular monitoring of AAQ at these 7 locations was taken up through private laboratories recognized by MoEF. This is in addition to the 3 locations where the GSPCB has been monitoring the AAQ for the past several years. An EIA study of Pileme Industrial Estate and the surrounding villages was carried out by the GSPCB through a MoEF recognized laboratory. Taking cognizance of the nuisance of dust pollution caused in the Port Town of Vasco-da-Gama due to handling of coal and coke by Mormugao Port Trust (MPT) at Berth No. 10 and 11, the Board directed the MPT to construct a closed shed for storing coal and coke and to mechanize the coal/coke handling operations at berth no. 10. The Board has been receiving complaints from the residents of villages surrounding the Verna Industrial Estate regarding depletion of water in the wells and agricultural lands due to the uncontrolled use of ground water by the industrial units operating in the Verna Industrial Estate. In keeping with the mandate given to it under the Water Act, 1974 and the Water Cess Act, 1977, the GSPCB released an amount of Rs. 15 lakhs from the Water Cess Fund and placed it at the disposal of the implementing agency, the Water Resources Department, for carrying out measures for Rain Water Harvesting and Ground Water Recharging at the Verna Industrial Estate.

Considering the nuisance of noise pollution caused by the public due to bursting of firecrackers and fireworks during the various festivals, the Board conducted an exercise for testing the fire crackers and fireworks for

compliance of noise levels as per the 'Fire Crackers Noise Standards'. Fire crackers of various brands available in the local markets were tested for compliance of noise levels. The World Environment Day, 2010, (5/06/2010) was observed by the Staff of the Board with great enthusiasm. The day was observed by organizing a cleanliness drive in the State Capital of Panjim, cleaning the streets of garbage and displaying banners with the theme of World Environment Day, 2010 "Many Species, One Planet, One Future".

The Chairman of the Board led a team of Board officials to Ahmedabad, Gujarat, where he along with the Chairman of Gujarat Pollution Control Board (GPCB) signed a Joint MoU on 12/01/2011, in the distinguished presence of the Principal Secretary (Environment), Government of Gujarat and witnessed by their respective Member Secretaries and other officials. The said MoU provides that the GPCB would make available to the GSPCB, any future improvement in XGN software developed by the NIC for the GPCB, free of cost.

During the year, several members of our staff participated in training programmes in different areas, organized by various institutions, both within the State and in other parts of the country. Two members of our scientific staff availed the "On Hand Training" on operation and maintenance of GC-MS at the Shimadzu Facility in Singapore, provided by M/s Shimadzu at their costs.

The manpower is the main asset of any organization. I was fortunate in having a bunch of dedicated, capable and hard working scientific, technical, legal and supporting personnel. The credit for all the achievements made during the year goes to them.



(DR. SIMON DE SOUSA)
CHAIRMAN

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CHAPTER 1

INTRODUCTION

1.1 GENERAL INTRODUCTION

The Goa State Pollution Control Board is an autonomous statutory organization constituted on 1st July, 1988 under the Water (Prevention & Control of Pollution) Act, 1974. Prior to that, when Goa formed part of the erstwhile Union Territory of Goa, Daman and Diu, the Central Board for the Prevention and Control of Water Pollution was performing the functions of the State Board in Goa. The Central Pollution Control Board at Ponda-Goa had established a Section Office for the purpose. The same arrangement continued till the constitution of the State Board. In the meanwhile, the Section Office was re-constituted as West Zonal Office and shifted to Baroda on 4th April, 1988. All the relevant records pertaining to Goa were transferred to the Goa State Pollution Control Board on 12th September, 1988.

The Goa State Pollution Control Board, after its constitution, established its office in the Goa Medical College Complex at Bambolim. In June 1991, the Government of Goa allotted independent premises for the Board at Patto- Panaji, where the Board shifted its' office in September 1991.

On 15th August, 2002 the Board acquired new premises on the 1st floor in Dempo Tower at Patto Plaza, Panaji and shifted its full set-up to this new premise. Subsequently, on 15th August, 2005, the Board acquired additional premises measuring 311.86 Sq. mt. on the 4th floor of the same building. The Physical and Analytical Laboratory-I was set up on the 1st Floor and the Physical and Analytical Laboratory-II and the Microbiology Laboratory were set up on the 4th Floor.

1.2 CONSTITUTION OF THE BOARD INCLUDING CHANGES THEREIN

The present Board was constituted under the chairmanship of Dr.Simon de Sousa. This Board was constituted vide Order No. 5/20/87-STE/(Part II)/239 dated 8th June, 2009 and the composition is as given below:-

Chairman

1. Dr. Simon N. de Sousa, Ex Dy. Director / Scientist 'F', National Institute of Oceanography, Dona Paula

Members

2. Chief Conservator of Forests, Forest Department, Panaji
3. Chief Engineer, Water Resources Department, Panaji
4. Director, Directorate of Industries, Trade & Commerce, Panaji
5. Director, Directorate of Mines & Geology, Panaji
6. Director, Directorate of Technical Education, Porvorim
7. Shri. Gurunath Laad, Councilor, Margao Municipal Council, Margao
8. Smt. Radha Kavlekar, Councillor, Margao Municipal Council, Margao
9. Shri. Saifullah B. Khan, Councillor, Mormugao Municipal Council, Mormugao
10. Shri. Basilio Fernandes, Member, Village Panchayat of Camurim, Salcete
11. Shri. Ramkrishna Kerkar, Member, Village Panchayat of Candolim, Bardez.

12. Shri. Caesar Menezes, President, Goa Chamber of Commerce & Industries, Panaji
13. Shri. Atul Naik, President, Goa Small Industries Association, Panaji
14. Shri. Jose Manuel Noronha, Bhagbhat, Raia, Salcete
15. Managing Director, Goa Industrial Development Corporation, Panaji
16. Managing Director, Goa State Infrastructure Development Corporation, Panaji

Member Secretary

17. Shri Srinet Kothwale, Goa Civil Services

1.3 CONSTITUTION OF THE TECHNICAL ADVISORY COMMITTEE

The Technical Advisory Committee re-constituted by the Chairmanship of Dr. Simon N. de Sousa vide Order dated 08/07/2009 continued to be in force for the year under report. The Committee comprises of following members:

1. Shri. Srinet Kothwale, Member Secretary, Goa State Pollution Control Board.
2. Dr. Mohan Girap, Project Scientist, (Geology), Goa State Committee on Science and Technology
3. Shri Anil Kher, B.Tech (Chemical) 464, Landscape Pinto Park, Campal, Panaji Goa.
4. Shri Pascoal Noronha, B.Sc B.E (Civil), House no. 206, St. Joaquim Road, Borda, Fatorda, Margao Goa.
5. Shri Sridhar Kamat, B.E (Civil), M-50- Housing Board Colony, Gogol, Margao Goa.
6. Dr. Savita Kerkar, Reader, Dept. of Marine Bio-Technology, Goa University, Bambolim
7. Mrs. A.A. Barretto, Head of Dept. (Food Technology), Govt. Polytechnic, Panaji
8. Dr. Xivanand Verlekar, Retd. Scientist – (Biologist) N.I.O, 606, Pinto Vaddo, Candolim, Bardez Goa
9. Prof. Suraj Rane, Padre Conceicao College of Engineering, Verna, Salcete Goa. – B.E (Mechanical) M.E (Industrial Engg), Pursuing Ph.D

Shri Sanjeev Joglekar, Assistant Env. Engineer of Goa State Pollution Control Board was appointed as Convenor/Facilitator for the Technical Advisory Committee. It was decided that five members will form the quorum for the meeting.

The Committee held weekly meetings on every Monday at 4.00 pm in the Conference hall of the Board to scrutinize and make recommendations / comments / suggestions on the applications from industrial units received by the Board for Consent to Establish / Operate / Renewal of Consents under the Water and Air Acts, Authorizations under the Hazardous Waste Rules, Bio-medical Waste Rules, etc. (except those of Green category industries). The applications from green category industries were scrutinized by the technical and scientific sections of the Board and approved by the Chairman on recommendation by the Member Secretary for grant of Consents.

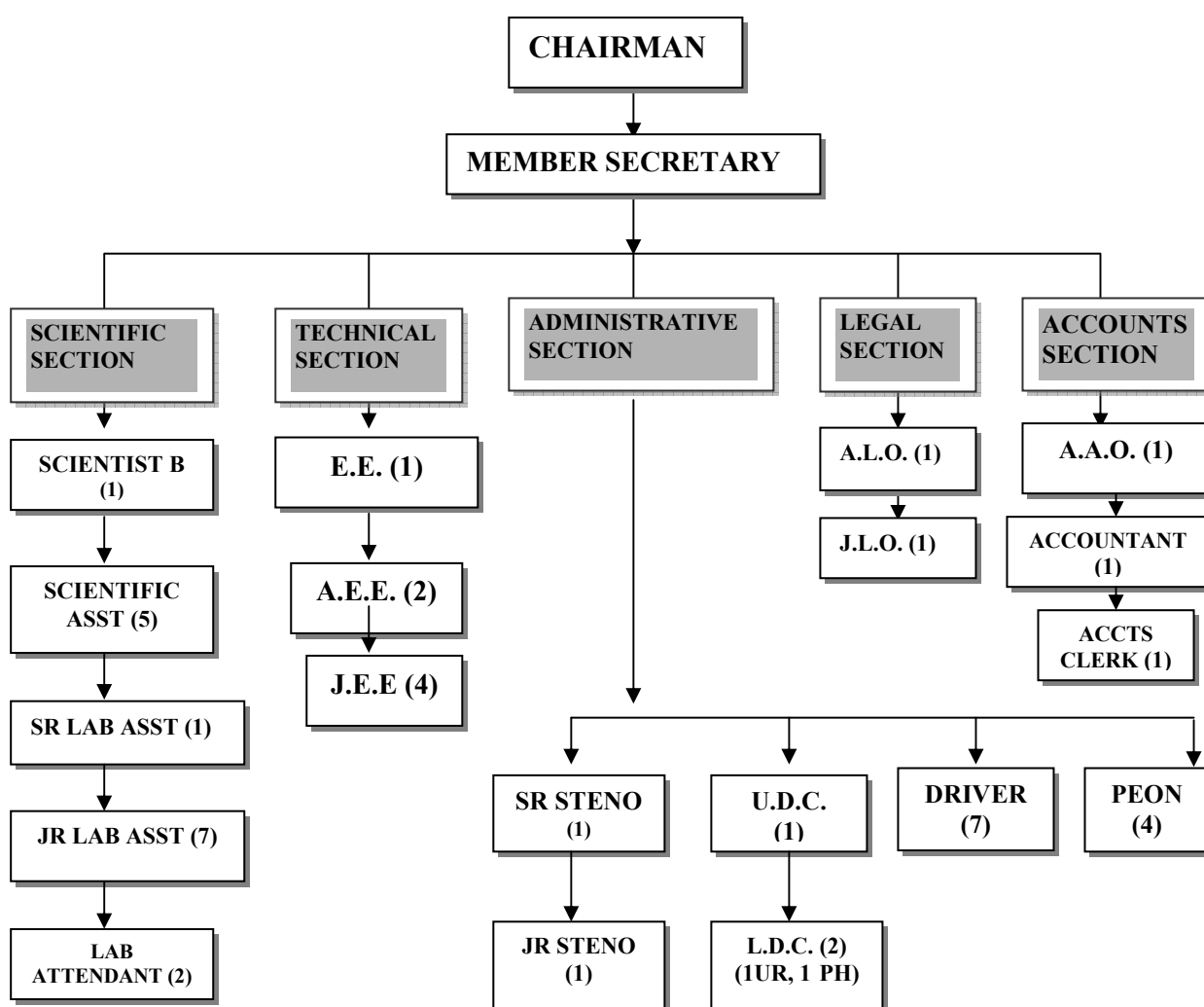
The recommendations of the Technical Advisory Committee meetings, in the form of Minutes, were placed before the Chairman for approval and on approval by Chairman; Consent Orders were issued by the Member Secretary.

CHAPTER 2

THE ESTABLISHMENT

2.1 STAFF OF GOA STATE POLLUTION CONTROL BOARD

ORGANIZATION CHART



Apart from the above employees, the Board has into its employ additional 14 employees on contract basis.

2.2 INFRASTRUCTURE FACILITIES

2.2.1 LABORATORY FACILITIES

The Board has two full fledged laboratories, one on the 1st floor and the other on the 4th floor. These laboratories are well equipped with instruments and equipments needed for carrying out analysis of water, air and soil samples for chemical, physical and bacteriological parameters including trace and toxic metals, pesticides and organic components. The Board has sophisticated instruments like Atomic Absorption Spectrophotometer with Flame and Graphite Furnace Modules, Gas Chromatograph, Total Organic Carbon Analyzer, etc. Recently, the Board has procured Carbon Monoxide (CO) Analyzer, Gas Chromatograph – Mass Spectrophotometer (GC-MS) and Toxicity Characteristic Leachate Procedure (TCLP) Kit through funds provided by the Ministry of Environment & Forests.

The Board also put up a proposal to the Central Pollution Control Board for setting up of 7 additional ambient air quality monitoring stations in mining areas. The proposal was approved by the CPCB. However, since the board did not possess the equipment and manpower to run these additional stations, it decided to outsource this activity to the MOEF recognized laboratories by inviting tenders.

2.2.2 WEATHER MONITORING STATION

Meteorological data such as Wind Direction, Wind Speed, Ambient Air Temperature, Humidity, Solar Radiation and Rainfall was regularly monitored using the Automatic Weather Monitoring Station (AWMS). Data on these 6 parameters were regularly displayed on the Display Board set up at GSPCB office.

2.2.3 MOBILE LABORATORIES

The existing three Mobile Laboratories were put into operation. These mobile laboratories were extensively used for conducting inspections and monitoring programmes during the year.

2.3 FRONT OFFICE

The front office of the Board located on the 1st floor is occupied by the Chairman's cabin, the Member Secretary's cabin, cabin of PA to Chairman, Visitor's lounge, Security and Inward Section. The Administrative, Technical, Legal and Accounts Sections are also located on the 1st Floor adjacent to the Front Office.

2.4 LIBRARY FACILITIES

The Board has a spacious library of its own on the 4th Floor. It has varied publications from different departments/institutions, such as MOEF, CPCB, other State Boards' Annual Reports, etc. Legal, accounts and technical books, ISI Specifications, etc. are also available in the Boards library.

2.5 CONFERENCE ROOM

The Board has a spacious Conference Room on the 1st floor with a seating capacity for 60 people. It is fully air conditioned and has facilities like whiteboard, TV and Video. All Board Meetings and some other important meetings are held in the Conference Room.

CHAPTER 3

ACTIVITIES OF THE BOARD

3.1 MEETINGS OF THE BOARD

During the year under report, the Goa State Pollution Control Board held four Board Meetings under the reconstituted Board. The details of the meetings held during the year are presented in the Table below:-

Sr. No.	Sr. No. of Meeting	Date of meeting	Venue	No. of members who attended the meeting
1.	97 th	07/05/2010	Board's Conference Hall	10
2.	98 th	19/08/2010	Board's Conference Hall	10
3.	99 th	28/10/2010	Board's Conference Hall	8
4.	100 th	04/03/2011	Board's Conference Hall	11

3.2 MAJOR DECISIONS TAKEN BY THE BOARD

97TH MEETING OF THE BOARD

In the 97th Meeting, the Board took the following decisions:

- With respect to the matter of coal handling by Mormugao Port Trust (MPT) at Berth No 11, MPT submitted a preliminary report on the feasibility study for mechanization for coal handling at Berth No 11 and had sought 8 weeks time to submit a detailed feasibility report. The members decided to grant 8 weeks time to Mormugao Port Trust as requested by them for submission of detailed feasibility report for mechanisation of coal handling at Berth No 11.
- As decided in the earlier Board meeting, directions were issued to the three mining companies of Sirigao to implement the following three measures recommended by NEERI.
 - a. Construction of re-charge trenches to control seepage of water into mining pits.
 - b. Proper slope stabilization in the mining areas to minimize run-off from the over burden dump material to the nearby agricultural fields
 - c. Remediation technique for bio-remediation of silted fields.

The CGWB WRD and officials of NEERI were of the opinion that further feasibility study requires to be carried out in order to implement the recommendations made by NEERI.

As regards (i) Roof top water harvesting structure and (ii) Construction of sub-surface dykes and Bentonite grouting to control seepage; request was made to the Water Resources Department to undertake the study. The Chairman further informed the members that an Affidavit to this effect has been filed in the Hon High Court in W/P No 01/2008 and the Board would be conducting inspections of the mining units to verify the compliance to the directions issued by the Board. The members perused and approved the same.

- The members approved for revised consolidated pay for the contract staff as per Sixth Pay Commission and as per the letter no.7-55-2002/STE-DIR/Estt/P-IX/190 dated 05/05/2010 of the Dept. of Science, Technology & Environment and with deduction in salary for 4 days to be effective from June, 2010.
- The Chariman informed the Board that, the Central Pollution Control Board has approved the following seven new stations in the mining areas of Goa and would be financing the monitoring programme on 50%:50 % cost sharing basis.
 1. Curchorem near Railway yard
 2. Usgao - Pale junction
 3. Codli Tisk
 4. Honda Junction
 5. Bicholim
 6. Amona
 7. Assonora Junction

The Chariman informed the Board that since the Board does not have both equipment and manufacture to carry out the above work on its own, it has decided to out source it through MOEF recognized laboratories by inviting tenders.

The members expressed that there were several newspaper reports and complaints from the residents regarding dust pollution due to transportation of iron ore from the above cited areas. The members were of the opinion that once the data regarding air quality was available with the Board, the Board should take stringent action against the defaulters and agencies responsible for the violations of Air Quality norms.

The members approved for outsourcing the work of Air monitoring at the above seven stations to laboratories recognised by the Ministry of Environment and Forest under Environment (Protection) Act by calling the tenders for a initial period of one year.

- *Environment Impact Assessment Studies:*
The Board in its 84th meeting held on 31/12/2007 had decided to carry out EIA studies at Pilerne Industrial Estate, Verna Industrial Estate and Kundaim Industrial Estate. The Chairman informed the members that tenders were invited for EIA study at Pilerne and the same is in progress. However work of EIA study for Kundaim and Verna has yet not been taken up. The Chairman informed that it is proposed to undertake the above works by call of tenders from the Laboratories recognised by the Ministry of Environment and Forest under the Environment (Protection) Act.

The members approved the proposal for carrying out EIA studies for Kundaim and Verna Industrial Estates through Laboratories recognised by the Ministry of Environment and Forest under the Environment (Protection) Act, by call of tenders.

The members also approved for call of proposals for carrying out comprehensive EIA study for mines operating in Sanguem Taluka through reputed laboratories of Council of Scientific, Industrial Research such as National Environmental Engineering Research Institute, Nagpur, Central Mining Research Institute, Dhanbad, and Indian School of Mines, Dhanbad and other similar Institutes.

- *Classification of Rivers:*

The Central Pollution Control Board had earlier carried out classification of river Zuari and Mandovi in the early 1980's. The Chairman further informed the members that as per Section 17 sub section (g) of the Water Act, State Pollution Control Board is empowered to lay down or modify the effluent standards for sewage and trade effluents and for quality of receiving waters resulting from discharge of effluents and to Classify Waters of the State. The Chairman informed the members that M/s Syngenta India Ltd. and M/s Merck Ltd. are discharging their treated effluents into the river Mandovi. The classification of water is based on the Designated Best Use. The Chairman informed the members that in the first phase it is proposed to re-classify the Rivers Mandovi and Zuari and classify the River Sal and entrust the work for the same to National Institute of Oceanography

Shri S.T.Nadkarni, Chief Engineer Water Resources Department and Shri Jose Manuel Noronha, Gen Manager (Projects) Agnel Technical Complex were of the opinion that this is an exhaustive work and would require a long period of time.

The members decided that the Board should seek detailed proposal from National Institute of Oceanography for re-classification of the river Mandovi and Zuari and classification of River Sal including the financial implications and place the same before the Board for further decision in the matter. It was also decided to take the views of Water Resource Department at the first instance and the study should be carried out in phase wise manner.

- *Identification and study of water quality in perennial springs in Goa:*
The Board had proposed to undertake the study of water quality in perennial springs in Goa through National Institute of Oceanography. Shri S. T. Nadkarni, Chief Engineer, Water Resources Department, informed that the Water Resources Department would be undertaking this work. Therefore, the members decided to drop the proposal to avoid duplicity of studies.
- The members perused the Audit Report for the financial year 2003-2004 submitted by Government appointed auditor M/s Harite and Associates and approved it.

The Board further authorized the Chairman the Member Secretary the Accounts accounts cum Administration Officer & the Accountant to jointly sign the Audited Annual Accounts of the Board

- In view of the letter No 03/CAV/41-94 dated 19/01/2010 from the Director General (Commercial) Comptroller & Auditor General of India, New Delhi, the members approved the payment of Rs 30,000/ plus Service (if any) to the Auditor with effect from year 2003 - 2004 per audit report and decided to send the proposal to the Department of Science, Technology & Environment, Govt. of Goa for its approval.
- Goa Mineral Ore Exporters Association submitted a representation to the GSPCB not to insist on Forest Clearance or permission from Chief Wild Life Warden stating that, the concerned competent authority has power to take action as per the provisions of the respective acts.

The Chairman and Member Secretary informed the members present that earlier Consent was granted to mining companies and were also renewed without insisting on clearance from Chief Wild Life Warden or under the Forest Conservation Act even though it was specified in the Environmental Clearance that the E.C was subject to obtaining permission from Chief Wild Life Warden or permission under Forest Conservation Act.

The members were of the opinion that the Board can seek all the permissions before deciding on the applications for Consent. The Chairman and Member Secretary also informed the members that the Board has to decide on the applications within 120 days of receipt of applications.

The members decided to seek written opinion from the Department of Mines and Geology and Forest Department whether the Board could consider the pending applications for Renewal of Consent without insisting on permissions from the Chief Wild Life Warden and or under the Forest Conservation Act and, if required, hold a special meeting of the Board to decide on the issue on receipt of the clarification from the Department of Mines and Geology and Forest Department.

- The members approved the proposal for implementation of ISO 9001 in the Board and for appointment of Consultant by call of quotations from Govt. approved Consultants for an estimated initial amount of Rs 1,80,000 (Rupees One lakh eighty thousand only).
- With respect to the representation received from the Goa Chamber of Commerce and Industries regarding the decision on the applications for Consent to Establish and Consent to Operate (New) for expansion of existing Industries, the members decided that the applications of Large Scale Enterprises and Medium Scale Enterprises in Red and Orange Category should be placed before the Board for decision and those in green category should be decided by the Chairman.
- The Members approved to grant consent to establish to M/s Pentair Water India Private Limited (Expansion), and to M/s Birla Furukawa Fibre Optics Ltd. at Verna Industrial Estate subject to the condition that the concerned units should make alternate arrangements to meet their water requirements.
- With respect to the application of M/s Automobile Corporation of Goa Ltd., Bhuipal Sattari Goa for Consent to Establish (Expansion of the unit), the members approved to grant Consent to Establish to M/s Automobile Corporation of Goa Ltd., Bhuipal, Sattari Goa for their proposed expansion subject to the condition that the unit should establish Sewage Treatment Plant for treatment of domestic sewage.
- Mormugao Port Trust (MPT) proposed the expansion of Mormugao Port in stages. The proposed projects include:-
 1. Construction of additional break water
 2. Construction and development of Iron ore terminal at Berth No 8
 3. Development of coal handling terminal at Berth No 7
 4. Cruise cum Container berth terminal / berths for Indian Coast guards, NIO ships , Foreign Navy vessels etc
 5. Construction of new berth at berth No 4 for offshore supply and logistics for serving offshore energy exploration.
 6. Construction of fishing jetty.

The members perused the presentation made by the officials MPT and were of the opinion that since Mormugao Port Trust will be carrying out major expansion which would require obtaining Environmental Clearance from the Ministry of Environment and Forest, it should carry out a comprehensive EIA Study considering the impact of Sea erosion etc. for all the expansion projects and should also undertake public consultation. The members decided to authorise the Chairman and the Member Secretary to convey the views of the Board to

the Ministry of Environment and Forest, Government of India, State Government as well as the Mormugao Port Trust.

- With respect to the application of M/s Damodar Mangalji & Co. Ltd. (Marasodo Iron Ore Mine Surla), for Consent to operate under the Air and Water Acts, the members deliberated at length and observed that the proposal is for Consent to Operate (New) and decided to defer the application until the Mining Policy is approved by the State Government. The members further decided to communicate the decision of the Board to the applicant.
- Considering the need for adopting measures for 'Implementation of Rain water harvesting and Ground water re-charge measures in Verna Industrial Estate', the members authorised the Chairman to place an amount of Rs 15 lakhs at the disposal of the implementing agency for carrying out Rain water harvesting and ground water recharge measures in Verna Industrial Estate..
- The Central Pollution Control Board has provided financial assistance for execution of various schemes identified which involves preparation of various study reports including preparation of report on **"Strengthening of the Goa State Pollution Control Board"**. The work of preparation of the report was awarded to M/s UPL Environmental Engineers Ltd. and the agency has submitted a draft report. The report was perused by the Committee appointed by the Board for assessing the reports and has submitted its report alongwith various recommendations.

The members perused the report on **"Strengthening of the Goa State Pollution Control Board"** and the report of assessment submitted by the Committee appointed by the Board and thereafter approved it and recommended that it be adopted and implemented in toto after obtaining necessary approval of the Government of Goa (Dept. of ST&E)

- Regarding the proposal for implementation of uniform validity of Consent under the Water & Air Acts and Authorisation under the Hazardous Waste Rules, the members passed the following resolution:-

"Resolved that proportional fees for differential period of the validity should be charged by the Board to bring about uniformity in the validity of Consents under the Water and Air Act and Authorisation under the Hazardous Waste Rules.

Resolved further that the Member Secretary is authorised to issue Common Consent and Authorisation (CCA) under the Water & Air Acts and Hazardous Waste Rules, as supported by XGN Software."

- With respect to the report on inspection of Hotels, Restaurants, Eateries, Colva Creek, Open spaces, Storm water drains in Colva – Goa, the members perused the report and decided to :-
 1. Issue Show Cause Notices to the Hotels that are discharging waste water outside their premises without treatment / for not obtaining the Consent of the Board / for not establishing Sewage Treatment Plant (including submission of Bank guarantee of one lakh with validity period of 3 months) / non operation of the Sewage Treatment Plants.

2. Forward the inspection report to the Department of Tourism, Directorate of Health Services and Food and Drug Administration to take necessary action in the matter.
3. To direct the Village Panchayat of Colva to carry out house to house collection of segregated Solid waste in compliance with the provision of the Rural Garbage Disposal Scheme, 2005 as amended in 2007 to stop the pollution of Colva Creek.
4. Recommend to the State Government / Public Works Department to implement a common sewerage scheme in the area for proper treatment and disposal of sewage and sullage water.

98TH MEETING OF THE BOARD

In the 98th Meeting, the Board took the following decisions:

- The Board in its 77th meeting had decided that those small scale industries who are registered permanently with Directorate of Industries, Trade and Commerce and have not obtained consent to operate from the Board should be charged one fee for the past period on pro-rata basis and no late fee should be charged upto 31st March, 2007. The members further decided that if the industries / enterprises do not submit their applications by 31st March, 2007, the units should be directed to pay past fees as well as late fees.

In the 79th meeting, the members decided that a 30 days extension should be granted to small scale industries for submitting applications after the 'Combined form' is notified by the Government. Till date, the combined form is not notified by the Government.

During the 88th meeting held on 6th June, 2008, the Board had agreed for levying of one fee for the past period of operation for International Centre, Goa on receipt of representation from them. Likewise, the Board is now in receipt of a representation from M/s Goa Rajee Auto requesting the Board that the facility of payment of one past fee on pro-rata basis for past period of operation should be made available to their unit as is available to the permanently registered small scale units and being a service industry, they are not registered with the Directorate of Industries, Trade and Commerce. The Board decided to levy one past fee for permanently registered SSI units having either Water Consent or Air Consent until the Combined Form is notified by the State Government.

- Chairman informed the members that the Board in its 77th meeting held on 29/01/07 had decided to explore the possibilities for acquiring land and constructing an independent building for housing its office and laboratories. However, no action has been initiated in this regard till date.

The Board is presently housed in 1000 sq. metres of built up area on the first floor and fourth floor of Dempo Tower building at Patto Plaza. Part of the laboratory is on the first floor and the remaining part is on the fourth floor which is not contiguous.

He further informed the members that the Board is now in the process of purchasing additional equipments.

Chairman requested Shri Sanjit Rodrigues, the Board member and Managing Director of the Goa State Infrastructure Development Corporation to assist the Board in identifying

suitable land for this purpose. Shri Rajendra Kerkar also suggested that the Board could explore the possibility of requesting the Comunidade of Pilerne and other Comunidades in the vicinity of Panaji, for allotment of suitable plot.

After deliberations, the members unanimously decided that the Board should have its own independent building. It was also decided that the Board may request the Collector, (North Goa), Planning and Development Authority, Goa Housing Board or the Comunidades to provide a suitable plot of land in Panaji City or in its vicinity with an area where a building of 2000 sq. mtrs. built up area is permissible.

- Chairman informed the members that the Board in its 77th meeting held on 29/01/2007 had approved appointment of National Environmental Engineering Research Institute, Nagpur (NEERI) to carry out assessment of ground water soil, and surface water due to the past and present activities of M/s Sunrise Zinc Ltd. (SZL), at plot no. L-2, Cuncolim Industrial Estate and M/s Nicomet Industries Ltd.(NIL), at plot no. L-15, 19 and 20, at Cuncolim Industrial Estate at the quoted rate of Rs. 20 lakhs plus service tax as applicable.

Accordingly, M/s SZL and M/s NIL deposited 50% of the amount this was forwarded to NEERI for commencement of the study.

NEERI has submitted an interim report of the said study. However, NEERI has not specified the following points in the report.

- a. Feasibility study on remediation of contamination of soil, ground and surface water.
- b. Delineation of remediation action plan for contaminated soil, ground water and surface water

On seeking clarification from the NEERI, NEERI has sought the payment of the balance amount of Rs. 10 lakhs for submission of the final report. Accordingly letters were issued to M/s NIL and M/s SZL for payment of the balance amount. M/s NIL has deposited an amount of Rs. 5 lakhs. However, the unit of M/s SZL is closed and not in operation since 2008 and the Board is now required to make a payment of Rs.5 lakhs to the NEERI.

After deliberations and considering the importance of the said study report to the Board, the members decided as follows:

- a. To pay NEERI an amount of Rs. 5 lakhs through the funds of the Board and debit the expenditure towards funds received under the Water Cess from the Ministry of Environment and Forests, Govt. of India.
 - b. Invite the officials of the State Bank of India, and apprise them of the report submitted by NEERI and the payment to be made to NEERI by M/s SZL in this regard.
 - c. Stake a claim to the State Bank of India for Rs. 5 lakhs towards the expenditure incurred towards the preparation of the report.
- Chairman informed the members that during its 78th meeting held on 21/02/2007, the Board had decided to auction the old mobile laboratory (Tempo Traveller) purchased in the year 1997, as the vehicle is no longer road worthy. He further informed the members that at present, the Board has engaged the present available vehicles for inspection etc. The members agreed to auction / condemn the said vehicle by following the necessary codal formalities. The members further agreed that instead of purchasing any new vehicle thereby creating an additional liability, the Board should hire vehicles for its official purposes by following the necessary codal formalities.

- Chairman informed the members that presently, the Board is having a Panel of Advocates for representing the Board in the various Courts. In a number of cases, the views of the Goa State Pollution Control Board and those of the State Govt. are required to be coordinated to ensure that the stand adopted by the State Govt. is identical to that adopted by the State Pollution Control Board. The members decided to request the Ld. Advocate General of the State of Goa to represent the Board in certain matters. The Board further authorized the Chairman to make allotment of cases as per the cases / Petitions etc.
- With regard to the report on Bio-medical waste and the information provided by the Chairman of the Sub-Committee, Shri Sanjit Rodrigues, the members of the Board felt that since the Goa Medical College Hospital, Bambolim is the major generator of the Bio-medical waste, i.e 60% of the total Bio-medical waste of the State it is not possible to prepare the reports without the inputs from these Institutions. The members decided that Chairman should bring this to the notice of the Secretary (Health) in this regard. The Chairman of the Sub-Committee further agreed to scrutinize the following reports:-
 1. Status of Sewage Management in the State of Goa.
 2. Status of Batteries (Waste Handling) as per the Batteries Waste Management Rules
 3. Status of Industrial Pollution control in the State of Goa.
 4. Disseminating information of State Pollution Control Board (at a glance like trend of air, water quality, status of pollution control in problem areas, projection of pollution in the next 5-10 years in the State.)

The members felt that Shri Sanjit Rodrigues should continue as the Chairman of the Sub-Committee for assessing all the above mentioned reports. The members thereafter decided to authorize the Chairman of the Board to issue an order to this effect and also authorized the Chairman of the Sub-Committee to co-opt members as required for scrutiny /comments on each of the above reports.

- With respect to the matter of Shirgao mining case, the members were of the opinion that the WRD should be requested to carry out field studies for implementation of the two measures suggested by NEERI/WRD A letter was issued to the WRD requesting them to conduct a study. Shri N. Somasundaram, Sr. Hydrogeologist of the Water Resource Dept has submitted his report on implementation of the following two measures as suggested by NEERI.
 - i. Roof top rain water harvesting structure.
 - ii. Construction of sub-surface dykes and Bentonite grouting to control Seepage.

The Sr. Hydrogeologist gave a detailed presentation before the Board with Google maps highlighting the following points:

- a. Roof top harvesting in individual houses:
75% wells in Sirigao Village were having depth to water level less than 3 metres in August, 2008 and the ground water level almost touches the ground level during some period the monsoon and these wells would reject additional re-charge (roof top rain harvesting and re-charging during monsoons).
About 15 wells located at higher elevations and foot hills may take additional re-charge during monsoons but re-charged water would migrate fast, therefore prolonged re-charge maybe required beyond monsoons for those 15 wells.

Ground water levels measured in the last week of May, 2010, indicated that wells located close to the field area and in the vicinity of the stream where water is

discharged from the mines, are not drying. 80% of the wells are rejuvenated and water was available in the month of May, 2010 due to re-charge measures taken up by the mining companies in the previous year. Wells were found to be dry in the small area between the PWD tank, Yatra ground, two wells near the temple and two wells in the south –eastern part of the Village.

The report of the WRD has suggested deepening of the dug wells on experimental basis, which are annexed at Annexure II of the Report. Further monitoring of ground water levels has been recommended in selected wells. The report has also suggested that further studies are required to be conducted to supplement the data collected by NEERI for deciding on deepening of wells as well as roof top rain water harvesting.

- b. Creating artificial re-charge structures:
The WRD report states that M/s Rajaram Bandekar Mining Company and M/s Chowgule & Co. have already established filtration unit and have made attempts to re-charge ground water to re-charge pits. The system should be made functional and additional re-charge pits may be constructed in locations where wells were found to be dry in May, 2010 (Yatra ground, Lairaya temple etc.)

The WRD report also suggests providing re-charge pits on the hill slope and extending the existing recharge pits to be considered for recharging wells which were found to be dry in May 2010.

- c. Control of seepage of water into mine by bentonite grouting along selected edges of mine:
NEERI had recommended in their report, bentonite grouting in between Assanora River and working mine of M/s Dempo Mining Corporation for controlling seepage of water from field to mine pit. The top bench of working phase is located 20 metres from Assanora River.

The report of the WRD suggests that the proposed bentonite grouting will reduce cost of pumping for M/s Dempo Mine, however, it will not help to improve ground water regime in the surrounding, neither it will rejuvenate dried up wells in the Village or improve the water levels of the (Holy tank). The proposed bentonite grouting at the edge of M/s Dempo mine would not serve any public interest in improving ground water regime of the vicinity.

The report of the WRD has suggested exploration of bore wells at 3 locations to explore the ground water potential.

- d. Conservation of ground water by creating backfilling area into the aquifer storage recovery system by construction of sub-surface dyke and adding clean mine water into the system

NEERI in its report has recommended construction of dyke of length 150 meters, height 30 meters, width at bottom 5 meters and width at top 1 meter like a gravity dam across backfilled area and to pump water into the backfilled pit of M/s Chowgule & Company.

The report of the WRD indicates that the above measures recommended by NEERI are not feasible for the following reasons:-

1. Since the sub surface dyke is to be constructed to a depth of 5 meters in closed water shed where ground water is flowing out in defined path, there should be a relatively impermeable stratum below the dyke. However, the situation does not exist at the site. The majority of the water from the village migrates to the field and there are different paths of migration.
2. There is no aquifer on upstream side of the proposed dyke.
3. There is no hard rock stratum available below the proposed dyke and water would find its way below the structure as the pumping is at lower elevation.
4. The mining pit has been partly backfilled and more backfilling is envisaged in the future. Proper backfilling would retard the free flow of water into the mining pit.
5. The stability of the structure is questionable as the geological formation is ranging from manganiferous clay, silt, gravel, etc., that has bearing capacity of 10 to 20 tons per sq.mts.

However, keeping in view the recommendations made by NEERI for construction of sub-surface dykes and the stability of the structure, vis-a vis the prevailing soil conditions, the report of the WRD recommends that the mining companies should provide a layer of impermeable mining rejects in between the existing back filled area and future area proposed for backfilling in lieu of clay stones or concrete sub-surface dyke recommended by NEERI. The level of backfilling at the village boundary should be higher and drainage trench may have to be constructed at the hill side and not village side.

- d. Lacuna in ground water assessment made by NEERI
The WRD report indicates that NEERI has not assessed water requirement for irrigation purpose for 20 hectares of fields. All mitigation measures suggested by NEERI will not rejuvenate springs traditionally used for irrigation.

The report of the WRD suggests that the flow in the streams of Warchowal and ground water seepages were source for irrigation for Kharif paddy. NEERI report has suggested for rejuvenating of dug wells and has not considered drying of springs and seepages for irrigation.

The report of the WRD suggests that as a long term measure it is desirable to supply water for irrigating the fields and horticulture through Tilari irrigation canal. Open type of bandharas required to be constructed for conservation of ground water across nallah(Warchowal).

- e. Efforts made by Government and Mining Companies
The WRD report states that PWD has commissioned a overhead tank for improvement in water supply. Water required for irrigation for some part of the agricultural fields is provided by the mining companies from the mining pit. Recharge ponds (percolation ponds) constructed releasing water into rivulet during 2009-10 has shown positive results in rejuvenation of dug wells.

It was decided that directions should be issued to the three mining companies to implement the suggestions / recommendations made in the Report of the WRD at serial no. 8, (page no. 7).

It was decided that the mining companies should be directed to submit design and drawings to the WRD and obtain their approval prior to execution of the works.

- The members were informed that Mormugao Port Trust has submitted a feasibility report for mechanized handling of coal and coke as well as construction of closed shed at berth No 11 as per the recommendations made by NEERI in its report and the directions issued by the Board. The members were also informed that MPT has submitted an application to the Board for carrying out an Environmental Public hearing for their new project i.e Development of Water Front, West of Break Water. The members were further informed that the Environmental Public Hearing has not been scheduled as the MPT has not complied with the decision taken by the Board in its 97th meeting for carrying out a comprehensive EIA Study for all the proposed projects. The members noted the same.

The officials of the MPT present during the meeting were asked to give a detailed presentation on their new project as well as clarify regarding the feasibility report for proposed mechanization of coal and coke handling and construction of closed shed at berth No 11. The officials of MPT made a presentation highlighting the following points:

- a. Development of Water Front, West of Break Water of Mormugao Port.
 - i. MPT presently handles iron ore at berth no. 9, which is a dedicated iron ore handling berth. In addition, iron ore is also handled at mooring dolphins and at anchorage.
 - ii. The proposed development will be a dedicated iron ore handling facility. The said facility will cater to barge bound Goan iron ore and rail bound Karnataka ore. Presently the ore transported by rail from Karnataka is unloaded at Sanvordem.
 - iii. The commissioning of this facility is seen as an advantage as it will support round trip utilization of rail wagons for transportation of coal and coke to Karnataka and iron ore from Karnataka to Goa.
 - iv. The project will involve capital dredging and the dredged material will be utilized for land reclamation of about 1.40 lakhs sq. mtrs.
- b. Development of 4 MTPA coal /coke handling Port terminal at berth no. 11.
 - i. As directed by the GSPCB, MPT proposes to develop mechanized coal and coke handling facility along with closed sheds at berth no. 11.
 - ii. The railway wagons bringing Karnataka ore for export at MPT will be available on their return journey for carrying imported coal at berth nos. 5, 6 & 7 allotted to private terminal operators as well as new mechanized berth no. 11.
 - iii. MPT proposes to construct two bulk material handling domes of 80,000 tons capacity each. In addition MPT proposes to have two more domes of capacity 1.60 lakh tons, considering that storage in each dome may be extended upto 20 days due to slow evacuation on account of limitations in rail connectivity.
 - iv. MPT proposes to install augers screw or continuous bucket type coal unloading equipment to maximize berth productivity and control dust generation.
 - v. Coal is proposed to be conveyed through fully enclosed continuous belt conveyors to the domes or the railway wagon loaders. Further, MPT proposes to install loading in motion wagon loaders to maintain continuous departure of loaded rakes.
 - vi. The proposed facility will also provide for transportation of coal by trucks
 - vii. Public private partnership thermal power generation projects are currently under development such as Udupi Power Corporation, Karnataka Power Corporation at Ediapur, Power Company of Karnataka Ltd at Kudigi, Coastal Karnataka Power Company at Kudgi or Mannur which would

- require imported coal.
- viii. The proposed facility is expected to be commissioned in the year 2014.
- c. Development of berth no. 7 for handling 5.2 million tons of coal at MPT
 - i. MPT has submitted an application for Consent to Establish for development of berth no. 7 for handling 5.2 million tons of coal for which MPT has sought Environmental Clearances from MOEF.
 - ii. The development work for berth no. 7 has commenced.
 - iii. The berth no. 7 will provide for transportation of coal by rail and by trucks. Presently berth no. 10 and 11 is handling about 1 million tons of coal and coke.

Shri Sanjit Rodrigues, Director of Industries, Trade and Commerce expressed that the MPT is carrying out piecemeal development of the projects and approaching the GSPCB for approval of individual projects. Further, he expressed that MPT has handed over berth nos. 5A, 6A and berth no. 7 to private parties for handling of coal and coke. MPT now proposes to mechanize berth no. 11 which is located close to the city of Vasco, for handling of coal and coke. The proposed development 'West of Breakwater' is furthest from the City and it would be appropriate and ideal to handle dirty cargo (coal, coke etc.) as well as liquid bulk cargo comprising of petroleum oil and lubricants for prevention of pollution and safety aspect of the Vasco city. Shri Sanjit Rodrigues, expressed that the views of the State Government should have been sought by MPT before deciding and awarding the Berth No 5A, 6A, 7, etc., for handling of coal and coke. He further sought from the MPT officials whether MPT has prepared a Master Plan for development of the port. MPT officials present for the meeting informed that a Consultant has been identified and the Master Plan is under preparation.

The members sought clarifications from MPT officials present for the meeting whether MPT could stop handling of coal and coke at Berth No 10 & 11 once the coal handling facility at berth No 7 is commissioned as the proposed facility would have arrangements to transport coal and coke by road through trucks. MPT officials present during the meeting clarified that such an commitment could not be given at this stage.

The members then expressed the following:-

1. MPT had earlier committed that once the mechanized coal loading berth facility at berth no. 5A and 6A is commissioned, handling of coal and coke at berth no. 10 and 11 would be stopped. However, coal and coke handling at berth 10 and 11 continued with the pretext that berth no. 5A and 6A had no facility for loading of trucks.
2. While processing the application for Environmental Clearance for the proposed 5 MTPA coal handling facility at berth no. 7 of MPT, the Expert Appraisal Committee has noted in their minutes that shifting of coal and coke handling from berth no. 10 and 11 to berth no. 7 will free the Vasco city from dust pollution
3. It is also noted that page no. 2 -11 of the EIA report for berth no. 7, that the Port is planning to **shift existing POL handling activities from berth no. 8 to berth no. 11, whereas MPT has now submitted a feasibility study for development of mechanized coal and coke handling facilities at berth no. 11. It has been further stated in the said page that the Port is planning an iron ore berth at Vasco bay, whereas MPT has now submitted an application for development of a dedicated iron ore berth**
4. MPT has commenced development of berth no. 7 without obtaining Environmental Clearance and Consent to Establish from the GSPCB.

5. It has been observed that the levels of particulate matter and respirable particulate matter in the ambient air are exceeding the permissible limits, in the Vasco City even after the short term measures suggested by NEERI have been complied with by MPT.
6. Overloading of trucks and non-evacuation of cargo within specified time is continuing.
7. MPT is not consistent with the commitments made earlier to various authorities in their communications, EIA study reports and applications.

Further, the members were of the opinion that directions should be issued to MPT to immediately stop the construction activity commenced at berth no. 7 until Environmental Clearance is obtained from the MOEF and Consent to Establish is obtained from the GSPCB.

The members also decided to issue show cause notice to the Mormugao Port Trust for non-compliance in respect of the long term and short term measures recommended by NEERI and directions issued by the Board to install continuous ambient air quality monitoring stations in Vasco town.

As the members were not satisfied with the presentation, they requested the Chairman to convene a Special Board meeting to exclusively discuss the issue of Mormugao Port Trust in detail, including the show cause notice to be issued by the Board, and that the officials of MPT should be invited along with their Legal Advisors to give a detailed presentation on their present facilities and their proposed facilities at the Port and the pollution control measures undertaken by them along with the Master Plan for development of the Port. The members desired that the representatives of Confederation of Indian Industries, Member Secretary of the Goa Coastal Zone Management Authority, Deputy Collector (Mormugao) and other concerned officials should also be requested to make it convenient to attend the said meeting. The same was also agreed to by the MPT representatives.

- Chairman informed the members that the Forest Dept. has submitted clarifications sought by the Board on the representation received from the Goa Mineral Ore Exporters Association. It was also informed that the Forest Department has stated that as far as clearance under Forest Conservation Act is concerned, the provisions of Section 2 of the Forest Conservation Act is attracted and the Environmental Clearance is invalid if the project proponent has not obtained the permissions from the Chief Wild Life Warden. Further, no reply is received from the Directorate of Mines and Geology.

Further, Chairman informed the members that the Hon. Minister for Power and Environment, Govt. of Goa has directed the Board to ensure that all mines operating in the State of Goa have their valid Consents to Operate under the Water Act and Air Act and has also directed the Board to dispose of all pending applications after giving due notice of 30 days to the interested parties.

The members were further informed that the mining companies whose applications are pending with the Board for Consent to Establish / Consent to Operate/ Renewal of Consent to Operate have been issued show cause notices to appear before the Chairman of the Board for a hearing .

After deliberations, the Board decided to call for a special meeting after receipt of all replies and the personal hearing to decide in the matter. It was also decided to request the Additional Principal Conservator of Forests, Goa to attend the meeting to assist the Board

as in majority of cases, issue of clearance under the Forest Conservation Act and Chief Wild Life Warden permission is required.

- The members perused the Audit Report for the financial year 2004-2005 submitted by Govt. appointed auditor M/s Harite and Associates and thereafter approved the same unanimously. The members further authorized the Chairman, the Member secretary, the Accounts Cum Administrative Officer and the Accountant to sign the Audited Accounts jointly.
- The members perused the representation made by the Goa Mineral Ore Exporters Association in respect to the fees for Consent under the Water and Air Act based on the Gross fixed Assets.

After deliberations, the Board agreed on the following points:

- a. That the plant and machinery used for mining operations within the mining lease, Whether owned or hired to be included for the purpose of determining the value of assets.
 - b. Determine the land value on the principles of valuations.
 - c. All trucks owned by the Mining Company whether used inside or outside the mining lease to be included for evaluation and hired trucks operating outside the mining lease should be excluded.
 - d. Accordingly direct to all the mining companies to submit the above details in an Affidavit, from the commencement of operations of their mine and also direct them to pay the relevant fees accordingly.
- Application for Consent to establish (expansion) received by the Board.
The members perused the application for consent to establish (expansion) submitted to the Board by the following industrial units:
 - M/s Aventis Pharma Ltd, Verna Industrial Estate
 - M/s Siemens Ltd, Verna Industrial Estate
 - M/s Crompton Greaves, Tivim Industrial Estate
 - M/s Nestle India Limited, Usgao, Ponda
 - M/s Essel Propack Limited, Kundaim Industrial Estate
 - M/s M.R.F Ltd, Usgao, Ponda
 - M/s Automobile Corporation of Goa Limited, Bhuipal, Sattari, Goa
 - M/s Berger Paints India Limited, Kundaim Industrial Estate
 - M/s Meta Copper and Alloys Limited, Upasnagar, Sancoale, Goa,
 - M/s GAIL (India) Ltd.

Members approved the proposal for expansion submitted by the following units:

- M/s M.R.F Ltd, Usgao, Ponda
- M/s Automobile Corporation of Goa Limited, Bhuipal, Sattari, Goa
- M/s Berger Paints India Limited, Kundaim Industrial Estate
- M/s Meta Copper and Alloys Limited, Upasnagar, Sancoale, Goa

Further in case of application of M/s GAIL (India) Ltd., the members approved to grant CTE to M/s GAIL (India) Ltd to lay a 24" Gokak – Goa spurline of DBPL once HPCC grant Clearance to the Project. Further the members decided to grant CTE (expansion) to the below listed units subject to the condition that the concerned unit submit their plans alongwith design for rain water harring and recharge to the GSPCB.

- M/s Aventis Pharma Ltd, Verna Industrial Estate
- M/s Crompton Greaves, Tivim Industrial Estate
- M/s Nestle India Limited, Usgao, Ponda

- The members perused the application for CTO (expansion) submit by M/s Oriental Ltd, Kundaim Industrial Estate, and M/s Lupin Limited, Verna Industrial Estate and decided to grant CTO (expansion) with the condition that the units submit their plans (including designs) to the GSPCB.
- The members approved to grant CTO (expansion) to M/s Mohit Steel Industries Pvt Ltd., Kundaim Industrial Estate, and to M/s Proctor and Gamble Hygiene and Health Care, Kundaim Industrial Estate.
- With respect to the application of M/s Xec Cadar Usman T.C. no. 25 of 1956 for CTE & CTO, The member decided to defer the decision until the State Mineral Policy is finalised.
- Central Government Departments like the Ministry of Environment and Forests, Govt. of India has recently outsourced and entered into contractual agreement for engagement of staff. It was decided to issue tenders in the local newspapers inviting offers for providing various types of services required by the Board, for entering into contractual agreement for a period of one year, with a suitable placement Agency/ Firm/ Service provider for providing the services.

The expenditure towards the above services shall be debited towards the funds received under the Water Cess from the Ministry of Environment and Forests, Govt. of India.

The Board further authorized the Chairman to engage staff on deputation basis from the State Government Departments and Autonomous bodies, as per deputation rules after assessing the staffing needs of the Board, so as to ensure that the day to day work of the Board is not hampered on account of shortage of staff.

99TH MEETING OF THE BOARD

In the 99th Meeting, the Board took the following decisions:

- The members desired to know whether the three mining companies at Sirigao had complied with the three recommendations of NEERI included in the directions issued by the Board. The Chairman clarified that the mining companies had initiated steps for complying with the directions; however, they have not fully complied with the directions. The members opined that directions should be issued to the mining companies to expedite the compliance.
- The Chief Engineer, Water Resource Dept. expressed his department's strong objection for approval of expansion projects of MPT. He stated that establishment of these projects will result in damages to the coast line and will also cause sea erosion as is visible in the coast of Candolim due to grounding of the River Princess. He stated that Environment Impact assessment needs to be carried out for all the expansion projects of MPT, on the beaches of Goa. The officials of MPT were called to make presentation.

Shri A.J. Lokhande, Chief Engineer, MPT made a Power Point presentation. During the presentation the officials clarified as follows:

- a. Development of second coal terminal at berth no. 7 – It was stated that the Expert Appraisal Committee had recommended the project for grant of Environmental Clearance subject to clearance from Goa Coastal Zone Management Authority for the Project. The GCZMA has till date not issued clearance. However, in their earlier communications, the GCZMA had stated that the said area is CRZ- II, where Port development is permitted.
- b. Development of iron ore export terminal – West of Break Water – It was clarified by the officials representing the MPT that it is not possible to shift the coal handling activities to west of break water. Further, it was stated that MPT proposes to have a closed shed and a mechanized system at berth no. 11, for handling coal and coke, which will ensure reduction in pollution. As regards to the preparation of comprehensive EIA study for all the proposed projects, MPT officials clarified that though a Master Plan and Business Plan for MPT has been prepared, MPT proposes to undertake only the following three projects at present:
 - i. Development of second coal terminal at berth no. 7
 - ii. Development of West of break water terminal for iron ore.
 - iii. Construction of closed sheds and mechanization of coal handling at berth no. 11.

MPT officials clarified that combined EIA study for the above three projects could be considered.

The officials then stated that MPT had conducted Hydro-dynamic studies through CWPRS, Pune and the report of CWPRS indicate that there is no change in Hydro-dynamic conditions due to reclamation and break water construction. The officials further clarified that the following projects do not require Environmental Clearance, as the same are within the operational areas of the Port and do not involve capacity additions

1. Cruise Terminal / Base port for Indian Coast Guard / NCAOR vessels / NIO ships / Foreign Naval vessels.
2. Additional mooring dolphins.
3. Construction of berth no. 4.
4. Extension of berth no. 8.

It was further clarified by the MPT officials that the following projects are dropped / not initiated / executed by other agencies:

1. Cruise container berth at Baina Bay
2. 5.2 kms four lane port connectivity road (to be implemented by other agency).
3. Widening of 1.2 kms NH-17 between Sada Jn. And gate no. 1 of MPT.
4. New Port crafts / Custom vessels / Marine Police / Launches etc. jetty at Vasco bay
5. Construction of fishing jetty at Khariwada.

Shri A. Stephen, CEO, representing WAPCOS (Consultants of MPT) clarified regarding the mode of conducting Environment Impact assessment Study for various projects of the MPT.

With regards to the observations made in the inspections conducted by the officials of GSPCB, on compliance to the recommendations of NEERI, it was clarified as follows:

	Recommendations of NEERI	Compliance status by MPT
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a.	Evacuation of cargo prior to allowing next cargo vessel to berth	Evacuation hampered by restrictions imposed by Road Traffic Authorities. New four lane road and fly over will greatly mitigate this problem.
b.	Trucks found to be overloaded	Circular issued to Port Users Association (PUA). PUA has written to Road Transport Authority and Dy. Suptd. of Police to take strict measures in case of overloaded trucks.
c.	Tyres and body of loaded trucks to be cleaned with compressed air	The compressor was temporarily out of order due to electrical fault. Rectified on the same day by P.U.A.
d.	Covered storage facility for cargo at berths 10 and 11	Tenders invited.
e.	Silos to be provided for cargo handling	Tenders invited.

On perusal of the presentation made by MPT, the members deliberated and decided as follows:

A. Application of MPT for renewal of Consent to Operate under the Water and Air Act for handling coal and coke

On perusal of the presentation made by MPT and submissions forwarded by the representatives of MPT with regard to the show cause notice dated 09/09/2010, after detailed deliberations the members observed that:-

The MPT has not complied with the various recommended by NEERI and directed by the Board, till date. In view of this the members decided :

- i. To issue directions to MPT to ensure that construction of the closed shed and mechanization of coal handling at berth no. 11 is taken up on priority after obtaining Environmental Clearance, CRZ clearance and Consent to Establish under the Air Act & the Water Act for the said project from the Board. The said construction of the closed shed and mechanization of coal handling at berth no. 11 should be completed within 18 months i.e by 30/06/2012.
- ii. That the Board should conduct regular ambient air quality monitoring at the locations specified by NEERI in its report, from 01/12/2010 to 31/05/2011 through a laboratory recognized by Ministry of Environment and Forest, in order to verify the present status of ambient air quality in the Port Town of Vasco and assess the impact of coal handling operations at berth nos. 10 and 11 and to assess the efficiency of the pollution control measures adopted by MPT as recommended by NEERI and the Board in this regard. The cost towards the same should be recovered from MPT.
- iii. That in the event the reports of ambient air quality monitoring conducted by the Board as above indicate that the levels of particulate matter exceed the permissible limits thereby indicating that the short term measures adopted by the MPT are not efficient, the Board should initiate immediate stringent legal action against the MPT with regard to the coal handling activities at berth nos. 10 and 11.
- iv. To issue directions to MPT to install a Continuous Automatic Air Quality Monitoring station as per Central Pollution Control Board guidelines, at MPT

Institute for monitoring PM₁₀ and PM_{2.5} within a period of 60 days from the date of receipt of the directions.

- v. To initiate appropriate action as deemed fit upon receipt of the Ambient Air Quality monitoring reports.
- vi. That with regard to the observations that trucks carrying coal and coke are overloaded, the Director of Transport should be directed to ensure that trucks carrying coal and coke are not overloaded and adequately covered while leaving the premises of MPT.
- vii. That with regard to the applications for renewal of Consent to Operate under the Water Act and the Air Act as submitted by MPT, the same should be processed only after receipt of the results of the ambient air quality monitoring conducted by the Board, as well as from the continuous ambient air quality monitoring and after effective steps are taken by MPT for construction of closed sheds and mechanized handling of coke and coal at berth no. 10 and 11 as recommended by NEERI and as directed by the Board.

B. Request of MPT for conducting Environmental Public Hearing for the proposed development of West of Break Water.

On perusal of the presentation made by MPT and submissions forwarded by the representatives of MPT the members observed that the proposed expansion projects as seen from the proposals submitted by MPT would involve reclamation at various locations at the Port area, construction of breakwaters etc. which is likely to have several impacts on the environment:

Considering the submissions of MPT, vis-à-vis directions of the Board and non-compliance by the MPT, and on considering the predominant issue of coal pollution in the Vasco city, the Board decided to issue directions to MPT to submit a copy of the report of Hydro-dynamics studies conducted by CWPRS for perusal of the Board Members. And further carry out a comprehensive EIA study for the two projects i.e. Development of berth no. 7 and development of West of Break Water for iron ore export terminal along with CPWRS report. It was also decided that the application for conducting Environmental Public Hearing along with the fees deposited should be returned to MPT directing them to re-submit a fresh application on completion of the comprehensive EIA study considering both the projects and submission of CWPRS report.

C. Other expansion projects of MPT

On perusal of the presentation made by MPT the members noted that the MPT has commenced developmental work for some projects without obtaining Consent to Establish from the Board. The members therefore decided to issue direction to MPT to submit applications for Consent to Establish complete in all respects for the following projects, alongwith comprehensive EIA, Environmental Clearance, CRZ permission, namely:

- a Cruise Terminal / Base port for Indian Coast Guard / NCAOR vessels / NIO ships / Foreign Naval vessels.
- b Additional mooring dolphins.
- c Construction of berth no. 4.
- d Extension of berth no. 8.

- The members approved the Report on 'Feasibility study of steel slag usage in construction of embankment and pavement layers' submitted by Central Road Research Institute, New Delhi (CRRI). The members also decided to forward a copy of the report to the Public

Works Dept., Govt. of Goa, for implementing the recommendations made by CRRI in the report, as well as request for co-operation to conduct Phase – II of the Study. The members also suggested that a proposal should be sought from CRRI to conduct Phase – II of the study.

- With respect to the application of Commanding Officer, INS Hansa, Dabolim for Consent to Establish a Reverse Osmosis Plant for domestic use, the members decided to seek the following clarifications from INS Hansa:
 - a. The temperature and concentration of the brine proposed to be discharged into the sea.
 - b. To conduct an EIA study on the said proposal
 - c. Mode of treatment and disposal of the brine and brine concentrates into the sea.
 - d. Source of power supply for the proposed plant.
 - e. Mode of disposal of the waste membranes of the plant.
- The members perused the Audit Report for the financial year 2005-2006 submitted by Govt. appointed auditor M/s Harite and Associates and thereafter authorized the Chairman the Member Secretary the Account Cum Administration Officer and the Accountant to sign the Audited report jointly.

100TH MEETING OF THE BOARD

In the 100th Meeting, the Board took the following decisions:

- It was also informed to the members that the Board has been conducting ambient air quality monitoring at Vasco da Gama from the month of December and the report for the month of December indicated that at most of the locations the values of PM_{2.5} and PM₁₀ are exceeding the prescribed limits, only on few occasions they are within limits. In this regard the members decided to issue necessary directions to MPT.

Chairman further informed the members that during the recent inspection of MPT by the Board officials, it was noticed that MPT is carrying out construction activities without obtaining the required permissions of the Board, in spite of the various directions issued by the Board. The members then directed the board to file an F.I.R in this regard.

The Chairman brought to the notice of the members the serious allegations made by the former Chairman of MPT against the Board Member Shri Sanjit Rodriguous with respect to the views he had expressed during the 99th Board meeting held on 28/10/10, regarding the various illegallities carried out by the MPT. The members took a serious note of the allegations made against the Board Member and decided that Legal advice be obtained from the Counsel of the Board, for serving a legal notice on the former Chairman of MPT. It was also decided to forward a copy of the said legal notice to his Appointing Cadre.

- With respect to the application of M/s Berger Becker Coatings Pvt. Ltd. – Plot no. 114, Pilerne Industrial Estate, Pilerne, Bardez Goa, for issue of Consent to Establish in respect of its expansion proposal for installation of additional D.G set, solvent distillation equipment and Sewage Treatment Plant, the members approved the proposal of M/s Berger Becker Coatings Pvt. Ltd. – Plot no. 114, Pilerne Industrial Estate, Pilerne, Bardez Goa, for issue of Consent to Establish in respect of its expansion proposal for installation of additional D.G set, and Sewage Treatment Plant subject to the implementation of rain water harvesting and ground water recharge measures, however, the members decided

that the application for installation of solvent distillation unit should be granted only upon the receipt of HPCC clearance and approval of the EIA Report for Pilerne Industrial Estate. The Chairman informed the members that the HPCC approval has not been obtained by M/s Berger Becker Coatings Pvt. Ltd. However the Director of Industries Trade and Commerce informed the members that HPCC has not received any application from M/s Berger Becker Coatings Pvt. Ltd. Shri Ramkrishna Kerkar stated that since the Board is conducting EIA study in Pilerne Industrial Estate and a new project of solvent distillation should not be considered at this stage. The Chief Engineer, Water Resource Dept. stated that all the Industrial Estates are declared as scheduled areas under the Goa Ground Water Regulation Act 2002.

- The Board approved the proposals for expansion of the following industrial units subject to implementation of rain water harvesting and ground water recharge measures:
 - i) M/s Siemens Ltd, Verna Industrial Estate
 - ii) M/s Nestle India Limited, Maulinguem, Bicholim, Goa,
 - iii) M/s Glenmark Generics Ltd (Unit – II), Colvale Industrial Estate,
 - iv) M/s Cipla Limited , Verna Industrial Estate
 - v) M/s Teracom Limited, Kumdaim Industrial Estate
 - vi) M/s Unichem Laboratories Limited, Pilerne Industrial Estate
- The proposals received from the following industrial units were approved by the Board.
 - i) M/s Tulip Diagnostics (P) Ltd., Verna Industrial Estate for Consent to Operate for expansion for manufacture of Diagnostics reagents and kits.
 - ii) M/s John Distilleries Ltd., Cuncolim Industrial Estate for Consent to Operate (expansion) for manufacture of malt spirit.
- The members perused and approved the Revised Budget Estimates for the financial year 2010-2011 and Budget Estimate for the year 2011-2012, prepared in Form VI and VII, so as to enable the Board to forward the same to the State Government.
- The Chairman informed the members that the Sub Committee of the Board headed by the Director of Industries Trade and Commerce had conducted 5 meetings with the stake holders and approved the reports on Status Report of the Bio-medical Waste (Management and Handling) Rules, 2000 and the Plastic (Manufacture, Usage and Storage) Rules, 2000 submitted by M/s Padmaja Aerobiologicals Pvt. Ltd after suggesting adequate modifications / recommendations. The members approved the two reports prepared by M/s Padmaja Aerobiologicals Pvt. Ltd., so as to forward the same to the Central Pollution Control Board and recommend the same to the State Government for implementation.
- Chairman informed the members that as per section 5 of the Water (Cess) Act, 1977, every person carrying out an industry is liable to pay the Water Cess under section 3 of the Water (Cess) Act, to the prescribed Officer or Authority. Rule 4 of Water (Prevention and Control of Pollution) Cess Rules, 1978 provides that every consumer shall furnish returns on or before 5th of every calendar month, to the Assessing Authority in Form – I showing the quantity of water consumed in the previous month.

The amount of monthly assessment of Water Cess is sometimes meager, ranging from (Rs. 5/- to Rs. 400/- per month in most of the cases), a Water Cess Assessment order is prepared on yearly basis and forwarded to the industries.

The Chairman informed the members that the Central Pollution Control Board has sought the opinion of all the Pollution Control Boards regarding filing of yearly returns in lieu of the present system of filing monthly returns and assessment. As GSPCB has implemented the XGN software for on-line processing of applications for Consent and Authorizations, the members decided that the Board accept yearly submission of Water Cess returns and prepare yearly Water Cess Orders, so as to reduce the correspondence and simplify the procedure.

The members decided to communicate to the Central Pollution Control Board that the Industries should be asked to furnish yearly Water Cess Returns in Form – I (compilation of monthly Water Cess Returns in Form – I) on or before 5th April, for the preceding financial year and also issue yearly assessment orders.

- With respect to the applications of Mines for Renewal of Consent to Operate under the Air Act and the Water Act, pending with the Board for submission of clearance from the Chief Wild Life Warden and clearance under the Forest (Conservation) Act, the Chairman informed the members that there are total 105 mines who are granted Consent to Operate by the Board under the Air Act and the Water Act, and at present 41 cases are pending for Renewal under the Air Act and Water Act. On scrutiny of the applications it was noticed that some mines do not possess the required documents. The same have been classified as under:
 - a. Mines which had earlier obtained CWW permission, however, the validity had expired and valid approvals have not been submitted.
 - b. Mines which have submitted applications for CWW approval but have not been granted the same by the Forest Dept.
 - c. Mines that have submitted applications for clearance under the FCA, as specified in the E.C but have not been granted clearance by the Forest Dept.

It was also informed to the members that the Board had issued show cause notices and personal hearings have been conducted in respect of such mines. The Chairman further informed the members that during the hearing the mining companies have represented that the Board issues Consent under the Water Act and Air Act and should continue to issues such Consents subject to obtaining all necessary permissions prescribed under the Law and Acts in force. The Mining Companies have also represented that they should be allowed to operate in the non-forest area of the lease in view of the orders passed by the Hon High Court in W.P.No 722 of 2008 and 136 of 2008.

The members after perusing the legal opinion given by the Board's Counsel, Adv. A.N. S. Nadkarni in the matter expressed that the official representing the Forest Department should express the view of the Forest Department. Shri Cedric D'Souza, Deputy Conservator of Forests (Monitoring and Evaluation), Panaji representing the Forest Department clarified that there is no bar on issuing of Chief Wild Life Permission for the mines operating at a distance of 1 kms to 10kms from the Wild Life Sanctuary and hence the Forest Department has started issuing such permissions to the mining leases on case to case basis after verifying all the details and evaluating the impacts on wild life. The Deputy Conservator of Forests, further clarified that in case of mining leases comprising partly of private land and partly of forest areas and who have not obtained clearance under the Forest Conservation Act, such mines could be allowed to operate only in the non-forest areas provided they maintain a buffer of 7.5 meters from the Forest land in view of the orders passed by the Hon High Court in W.P.No 722 of 2008 and 136 of 2008. He

further stated that the mining units should clearly demarcate the forest area and non-forest areas, if any, in their lease.

Shri Nadkarni, Chief Engineer, WRD stated that most of the reject dumps are close to the nallahs and rivers and hence it is a complete violation of the Irrigation Act. Further, the Chief Engineer, WRD also expressed his reservations on mining activities being carried out close to the Selaulim Reservoir. He further stated that mining activities are being carried out much below the water table and in some cases even below the Mean Sea Level thereby depleting the ground water in the wells in the surrounding areas and that a detailed regulation and observation of pollution of water (surface water as well as ground water) is also a necessity. The members after detailed deliberation suggested that real time ambient air quality monitoring should be carried out in the mining areas to monitor the pollution levels. The members thereafter decided that a special meeting should be called with the Representatives of the Goa Mineral Ore Exporters Association, Goa Mining Association, Goa Chamber of Commerce and Industries, Goa State Industries Association, Director, Dept. of Science, Technology and Environment and members of the Technical Advisory Committee of the Board to deliberate on the issue of installing of on-line ambient air quality monitoring stations in the mining areas and funding for the installation and maintenance of the same.

- With respect to the EIA report of Pilerne Industrial Estate region, the Chairman informed the members that the office was receiving numerous complaints from the Saipem Village Anti Pollution Front regarding the waste water discharge and the emissions generated from the industries operating in the Pilerne Industrial Estate. The Front had sought for study to assess the contamination of the ground water resources in the neighbouring villages. The said complaints and demands were placed at the 84th meeting of the Board held on 31/12/2007 and it was then decided to conduct an EIA study for the Pilerne Industrial Estate, by call of tenders from the laboratories recognized by the Ministry of Environment and Forests, Govt. of India. Accordingly tenders were invited from the laboratories recognized by the MoEF and the lowest quotation of M/s Sadekar Enviro Engineers Pvt. Ltd., Panaji, was accepted and the said laboratory was issued a work order to conduct a EIA study of Pilerne Industrial Estate and the areas around it.

M/s Sadekar Enviro Engineers Pvt., Panaji has now completed the study and submitted the report. The report was placed before the TAC of the Board, wherein some changes suggested by the TAC members were incorporated.

Shri Ramkrishna Kerkar, Member of the Board and also Member of the Saipem Village Anti Pollution Front brought to the notice of the Board that M/s Sadekar Enviro Engineers Pvt., Panaji is a Consultant for the unit of M/s Berger Berker Coatings, Pilerne Industrial Estate and as such the report submitted by M/s Sadekar will be biased in favour of the Industry and as such the Saipem Village Anti Pollution Front will not accept the findings of the report. Shri Ramkrishna Kerkar stressed that the EIA report should be carried out through reputed institutions and laboratories of the Government.

After deliberations the members felt that M/s Sadekar Enviro Engineers has apparently committed a breach of trust. The members further requested to investigate the matter and if need be terminate the contract with M/s Sadekar Enviro Engineer immediately after issuing a show cause notice and hearing them. The members also decided that in case M/s Sadekar Environ Engineers have committed a breach of trust the matter should be brought to the notice of Ministry of Environment and Forests to de-recognize the laboratory as Environmental Laboratory. The members decided that in case it is confirmed that M/s

Sadekar Enviro Engineers has committed a breach of trust, the EIA work for Pilerne Industrial Estate should be retendered.

- The members perused and approved the draft of the Annual Report of the Board for the year 2009-2010, so as to place the same before the State Legislative Assembly.
- With respect to the Re-structuring of staffing pattern of the Goa State Pollution Control Board, the members sought to know from the Chairman the present income of the Board through fees and fixed deposits and the mode of paying the salaries of the additional staff. The Chairman informed the members that presently the Board earns interest of approximately Rs. 2 crores on the fixed deposits and also generates fund through fees. Further Chairman clarified that the salaries of the existing staff are about 1.2 crores which are met through the interest on fixed deposits. The Chairman then stated that the salaries of the proposed new staff could also be met through the interest on fixed deposits.

The members approved creation of 52 additional posts as suggested in the restructuring pattern along with the agenda item and also approved the recruitment rules for the staff with changes in the qualifying years for promotion to maintain consistency and to re-modify the Recruitment rules in line with the State Government guidelines and earlier Recruitment Rules approved and notified. The members also authorized Chairman to submit a proposal to the Government for approval / notification in consultation with the Director, Department of Science, and Technology & Environment.

- With respect to the application of M/s Nestle India Limited, Survey nos. 294/1, 2, 3 & 4 and 297/0, Usgao, Ponda Goa, for issue of Consent to Operate under the Water Act and the Air Act for expansion of the unit for enhancement in the manufacturing capacities of waffles and wafers, chocolates and confectionery products. The members approved the above proposal subject to the implementation of Rain water harvesting and ground water recharge measures.
- With respect to the application of M/s Glenmark Generics Ltd. (Unit – II), Plot no. S-7, Colvale Industrial Estate, Colvale, Bardez Goa for issue of Consent to Operate under the Water and Air Act (expansion) in their manufacturing capacities of its pharmaceutical products. The members approved the proposal subject to the implementation of Rain water harvesting and ground water recharge measures.
- Chairman informed the members that the Govt. has appointed a single Auditor for auditing the accounts of the Board for carrying out five audits i.e from the years 2006-2007 to 2010-2011.

3.3. VARIOUS FUNCTIONS PERFORMED BY THE BOARD DURING THE YEAR UNDER REPORT

3.3.1 INSPECTIONS AND MONITORING PROGRAMMES

3.3.1.1 REGULAR INSPECTIONS

The Goa State Pollution Control Board conducts inspections of the Industrial Units on regular basis, as required under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981. The inspections are carried out as follows:

- (i) Before the plant is commissioned / established, Consent to Establish (NOC) is issued for construction of the shed and establishing the machinery. After commissioning, the unit is inspected and Consent to Operate under Water Act or Air Act is granted, accordingly.
- (ii) Once the plant is in operation, the consents to operate under Water/Air Act have to be renewed periodically. At this stage the unit is inspected and samples are collected and analyzed in the Boards' laboratory to check the compliance of the consent conditions. Consent renewal orders are issued to the complying units.

3.3.1.2 SURPRISE INSPECTIONS

Besides the above regular inspections, surprise inspections are also being conducted to check the compliance by the units. To achieve this, industrial monitoring programmes are held at regular intervals, wherein the units are inspected at random with respect to the consent conditions. Samples of waste water, ambient air and stack emissions are collected and analyzed in the Board laboratory.

3.3.1.3 OTHER INSPECTIONS

Inspections in response to public complaints regarding Air / Water pollution, Hazardous Waste, Municipal Solid Waste, Biomedical Waste and Noise Pollution are also attended to by the Boards' officials as and when such complaints are received by the Board. The complaints are monitored by conducting inspections and collection and analysis of samples where ever required. Consequent to the inspections, legal notices are issued to the non-complying cases, where upon, the industrial units have to take up necessary remedial measures to close the non-compliances. Subsequently, these cases are re-inspected to monitor the non-compliances.

3.3.2 SAMPLING AND ANALYSIS OF WATER AND WASTE WATER

The Board has established its own laboratories on the 1st and 4th floor of Dempo Tower with the funds from MoEF and CPCB, New Delhi. The laboratories are well equipped with modern instruments to carry out water, air and soil analyses for physical, chemical and microbiological parameters. During the period from April 2010 to March 2011 the Board collected 1152 samples from various sources such as ETP, STP, discharge from mines (settling pond, mining pit, etc.), river water, well water, canal water, etc. and analyzed the same for the following parameters: pH, Biochemical Oxygen Demand, Chemical Oxygen Demand, Suspended solids and Oil and Grease, trace and heavy metals, etc..

3.3.3 SPONSORED PROJECTS

Apart from its regular activities, the Board has been implementing the following sponsored projects.

3.3.3.1 National Water Quality Monitoring Programme (NWMP)

The GSPCB monitors 29 water bodies throughout Goa under the NWMP project of the Central Pollution Control Board. These water bodies cover rivers, wells, canals, lake, reservoir and creek. The rivers include the two major rivers i.e., River Mandovi and River Zuari which are estuarine water bodies. In addition, water intake points for water treatment plants for public water supply, i.e., sweet water points in various rivers are also covered. Ground water sources (well

water) located within the industrial estates are monitored. These locations were selected to check the ground water quality in and around the industrial estates.

The 29 locations covered under this programme are distributed throughout Goa such that 15 stations are located in the North District and 14 are located in the South District

The following monitoring locations are in the North District:

1. River Mandovi at Panaji
2. River Mandovi at Tonca-Marcela
3. River Khandepar at Opa, Ponda
4. River Madei at Dabose, Valpoi
5. River Valvanti at Sanquelim
6. River Assanora at Assanora
7. River Kalna at Chandel, Pernem
8. Cumbarjua Canal, Corlim (Discharge point of Syngenta Ltd.)
9. River Mapusa on culvert on Mapusa-Panaji Highway
10. River Chapora near Alorna Fort, Pernem
11. River Bicholim, Barazan Nagar, Bicholim
12. Kundaim Industrial Estate (well of M/s Cadilla Health Care Ltd.)
13. Mayem Lake, Bicholim
14. Corlim Industrial Estate (well)
15. Pilerne Industrial Estate (well of M/s Unichem)

The following monitoring locations are in the South District:

1. River Zuari at Cortalim
2. River Zuari at Panchwadi
3. River Talpona at Canacona
4. River Khandepar at Codli near bridge, u/s Opa water works, Sanguem
5. River Sal, Pazorkhoni, Cuncolim (nr culvert, Margao-Canacona National Highway)
6. River Kushawati nr bundh at Kevona, Rivona, Sanguem
7. River Sal nr Hotel Leela, Mobor, Cavelossim
8. Salaulim Reservoir at Salaulim, Sanguem
9. Creek at Dando Mollo Velsao, Mormugao
10. Agricultural Canal u/s of Cuncolim Industrial Estate (1Km from M/s Nicomet Industries Ltd.)
11. Agricultural Canal d/s of Cuncolim Industrial Estate (near railway bridge)
12. Verna Industrial Estate (well of M/s Cipla Ltd.)
13. Sancoale Industrial Estate (well)
14. M/s Zuari Industries Ltd., Zuari Nagar (well)

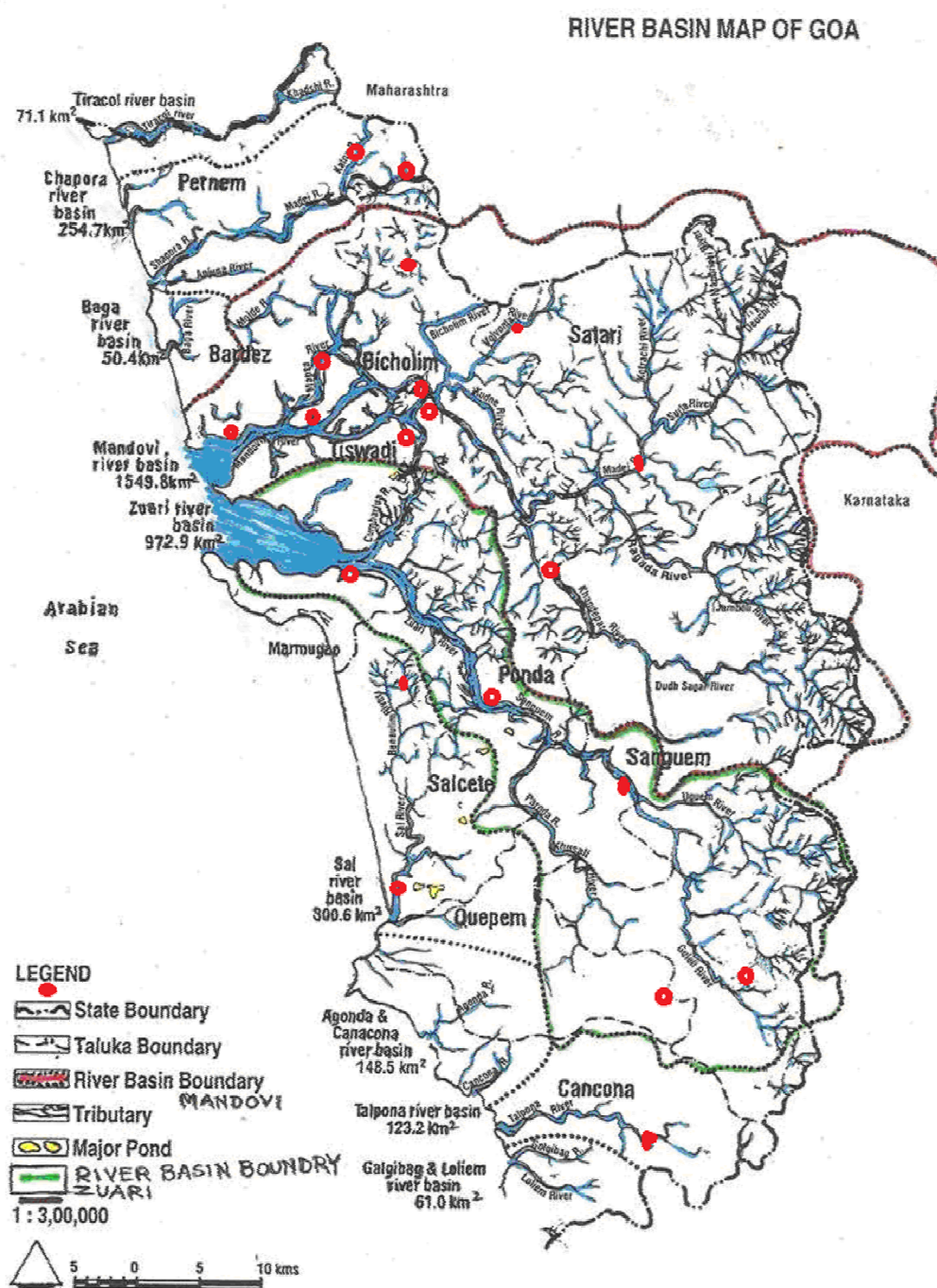
The total 29 locations are divided into three groups i.e., (i) 12 locations are being monitored monthly, (ii) 11 locations are monitored quarterly and (iii) 6 locations are monitored half yearly.

Hundred and Sixty Four samples were collected from all these water bodies and analyzed during the year (Hundred and Sixty Nine samples for 9 parameters during the regular monitoring and Twenty Nine samples for 37 parameters during annual monitoring).

The analytical results indicate that all the rivers mostly satisfy the quality requirement of the designated best uses as recommended by Central Pollution Control Board. The water quality data for the rivers observed during the year are given in Annexure II.

Figure 1 below is a map of Goa showing the water quality monitoring locations under National Water Monitoring Programme; MINARS. The monitoring locations are indicated in red.

Figure 1: Map of Goa showing the Water Quality Monitoring locations under the National Water Monitoring Programme; MINARS



Apart from the monitoring of the above 29 locations, the Board also monitored the water quality of River Sal at the following six locations on quarterly basis:

- (i) River Sal at Kharebhand
- (ii) River Sal at Jackni Bhand
- (iii) River Sal at Pul Waddo
- (iv) River Sal at Orlim
- (v) River Sal at Rumdar
- (vi) River Sal at Mungul

A total of 19 samples from the above six locations were analyzed during the year for 9 parameters. The water quality data for these rivers observed during the year is given in Annexure II.

3.3.3.2 NAMP (National Air Monitoring Programme)

This is an ongoing activity funded by the Central Pollution Control Board, New Delhi under the National Air Monitoring Programme (NAMP). Under this programme the Board continued to monitor the ambient air quality at Vasco, MPT at Mormugao and Panaji. In addition following new locations for monitoring Ambient Air Quality were proposed to CPCB by GSPCB - Codli, Honda Junction, Usgao-Pale, Amona, Assanora, Bicholim and Curchorem. The above proposal was accepted by CPCB. The Ambient Air Quality monitoring at the new locations was started in November 2010.

The Ambient Air samples were collected at each station twice a week, as per the standard norms for ambient air quality monitoring, and normal parameters like RSPM, SPM, SO₂ and NO_x were analyzed. The ambient air quality data for these stations observed during the year are given in Annexure IV. The analytical results show that all the above parameters are within the limits prescribed for ambient air quality for Vasco, MPT at Mormugao and Panaji, however there is an increase in the level of respirable particulate matter (PM₁₀ and PM_{2.5}) in case of the 7 new stations specially during the period from December to March.

The Ambient Air Quality Monitoring at the new locations in mining areas is being done as per the notification dated 18/11/2009. At these new locations the following parameters are being monitored on regular basis: NO_x, SO₂, PM₁₀ and PM_{2.5}.

Views of the 7 new monitoring locations established under this project are shown in the following pictures.



Plate – 3a: View of the PM₁₀ and PM_{2.5} Samplers placed at the NAMP Monitoring Station at Bicholim, Goa.



Plate – 3b: View of the PM10 and PM2.5 Samplers placed at the NAMP Monitoring Station at Honda – Sattari, Goa.



Plate – 3c: View of the PM10 and PM2.5 Samplers placed at the NAMP Monitoring Station at Assanora, Goa.



Plate – 3d: View of the PM10 and PM2.5 Samplers placed at the NAMP Monitoring Station at Amona, Goa.



Plate – 3e: View of the PM10 and PM2.5 Samplers placed at the NAMP Monitoring Station at Codli, Goa.



Plate – 3f: View of the PM10 and PM2.5 Samplers placed at the NAMP Monitoring Station at Curchorem, Goa.



Plate – 3g: View of the PM₁₀ and PM_{2.5} Samplers placed at the NAMP Monitoring Station at Usgao, Goa.

Figure 2 below is a map of Goa showing the existing and the new ambient air quality monitoring locations under National Air Monitoring Programme; NAAQM. The existing monitoring locations are indicated in green and the new locations are indicated in red.

Figure 2: Map of Goa showing the Ambient Air Quality Monitoring Stations under the National Air Monitoring Programme; NAAQM



3.3.4 ELECTRONIC DISPLAY BOARDS

The Board in collaboration with M/s Sesa Goa Ltd. and M/s Syngenta India Ltd. has put up electronic display boards at the respective factory sites to display levels of ambient air pollutants. In addition, Display Boards were also put up by M/s Zuari Industries Ltd. at four different locations on the 4-Lane Express Highway NH17-B to display levels of air pollutants within their campus.

3.3.5 IMPLEMENTATION OF HAZARDOUS WASTE (MANAGEMENT & HANDLING) RULES, 2008

The Hazardous Waste (Management & Handling) Rules were notified by the Ministry of Environment & Forests in the year 1989 under the provisions of the Environment Protection Act, 1986. Later the Rules were amended in the years 2000 and 2003 and subsequently, they were modified as the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules in the year 2008.

The Goa State Pollution Control Board grants authorizations to industries generating and handling hazardous wastes. At present the Goa State Pollution Control Board has identified 541 industrial units generating hazardous waste in Goa and authorizations have been granted to all 541 industries (since the inception of the Rules). During the year under report, 160 units have been granted authorization (new / renewals) under the Hazardous Waste (Management & Handling) Rules, 2008. The details such as location of the unit, category of hazardous waste, quantity generated and mode of disposal are given in Table 5 in Annexure V.

3.3.6 IMPLEMENTATION OF BIO-MEDICAL WASTE (MANAGEMENT & HANDLING) RULES, 1998

For the purpose of implementation of the Bio-Medical Waste (Management and Handling) Rules 1998, Hospitals have been classified as per their bedded capacity.

1. Category 1: With 500 beds and above	1 No.
2. Category 2: With 200 beds and above, but less than 500	1 Nos.
3. Category 3: With 50 beds and above, but less than 200	13 Nos.
4. Category 4: With beds less than 50 including Clinics & Patho Labs.	216 Nos.
5. All other institutions generating bio-medical waste (not included above)	3 Nos.

Till 31/03/2011, 234 Health Care Units were granted authorizations under the Bio-Medical Waste (Management & Handling) Rules, 1998. The status of the Bio Medical waste generated by these units during the year is given as Table 6 in Annexure VI.

3.3.7 NOISE POLLUTION (REGULATION & CONTROL) RULES, 2000

The Board conducts monitoring of noise levels whenever any specific complaints of noise pollution are received and action is taken accordingly. In pursuance of clause (c) of rule 2 of the Noise Pollution Regulation & Control Rules, 2000, the Government of Goa vide Notification No. 2/51/2000 –II D (G) Vol I has designated (1) District Magistrates (2) Director General of Police (3) Deputy Collector and Sub-Divisional Magistrates (4) Superintendent of Police and Sub-Divisional Police Officers as 'authority' for the maintenance of ambient air quality standards in respect of noise under the said rules, with effect from 21.09.2000. In view of this, the Board forwards to the Competent Authority all the reports of Noise Level Monitoring conducted by the Board for necessary action.

3.3.8 IMPLEMENTATION OF MUNICIPAL SOLID WASTES (MANAGEMENT & HANDLING) RULES, 2000

The Board has issued authorization to all the 14 local bodies under the Municipal Solid waste (Management & Handling) Rules. Five Municipal bodies have partly adopted effective composting methods for processing of their wastes.

The Board has amended the (Consent to Operate) CTO orders issued to a number of starred Hotels established, under the Water Act, and has DIRECTED these Hotels to install

Organic Waste Converter (OWC) at their establishments in order to treat the Bio-Degradable Waste generated by them. Presently, some of the Hotels have installed the same.

The Board has issued directions, under Section 5 of the Environment Protection Act, 1986 to the Village Panchayat of Taleigao, directing the Village Panchayat to comply with the provisions of the Rural Garbage Scheme, 2000. Compliance of the same is being monitored.

3.3.9 LEGAL MATTERS OF THE BOARD

The status of the major cases filed by the Board and the cases disposed off and the cases pending, in the High Court of Bombay at Goa and in the Supreme Court of India at Delhi is presented in Annexure VII.

The statement showing the details of number of requests received, disposed off, rejected, fees collected, appeals preferred to the first Appellate Authority, outcome of appeals etc. under RTI Act, 2005 for the financial year April 2010 to March 2011 is given in Annexure IX.

3.3.10.1 FINANCE AND ACCOUNTS OF THE BOARD

As per sub-sections 2 & 3 of section 40 of the Water (Prevention and Control of Pollution) Act, 1974, the accounts of the Board are to be audited by an Auditor duly qualified to act as an Auditor of Companies under section 226 of the Companies Act, 1956. The said Auditor is to be appointed by the State Government on the advice of Comptroller & Auditor General of India (CAG).

Auditing of the Board accounts for the year 2003-2004, 2004-2005, and 2005-2006 has been completed during the financial year 2010-2011. Thereafter, auditing of 2006-2007 will be taken up. Auditors for auditing of the accounts for the year 2006-2007 will be appointed by the State Government on the advice of CAG.

3.3.10.2 GRANT – IN – AID RECEIVED BY THE BOARD.

The Ministry of Environment and forests (MOEF) vide letter dated 03/12/2008, had sanctioned an amount of Rs. 70 Lakhs to the Goa State Pollution Control Board as a Grant -in - Aid for the purchase of laboratory instruments, like TCLP, GCMS and HPLC. The 2nd installment of Rs. 26,25,000/- of the above sanction was released during the financial year under reports. The Board procured two instruments namely, TCLP (Toxicity Characteristic Leachate Procedure Kit) and GCMS (Gas Chromatography Mass Spectrograph) costing Rs. 14,40,785/- and Rs. 44,57,025/- respectively, utilizing the above funds.

3.3.11 IMPLEMENTATION OF THE SUPREME COURT GUIDELINES ON PREVENTION OF SEXUAL HARASSMENT OF WOMEN AT WORKPLACE

Information in this regard, as per the Supreme Court judgment dated 13/08/1997, is that no complaints about sexual harassment at work place were received by the Board during the financial year covered by this report.

3.3.12 CELEBRATION OF WORLD ENVIRONMENT DAY

The GSPCB celebrated the World Environment Day on 05/06/2010 by displaying banners on the World Environment Day 2010 theme ('Many Species, One Planet, One Future') and

conducting a cleanliness drive in the State Capital, Panjim. The Board officials and officials of Directorate of Science, Technology & Environment conducted cleanliness drive through out the day cleaning the streets of garbage littered around. Photographs taken on this day are depicted in Plates 3A, 3B and 3C.



Plate 3h: Officials of GSPCB and DSTE displaying the banner on World Environment Day



Plate 3i: Officials undertaking cleanliness drive



Plate 3j: Officials undertaking cleanliness drive



Plate 3k: Officials marching in a procession through the streets of Panjim carrying banners on the World Environment Day theme



Plate 3l: Officials in the Conference Hall of the GSPCB for a discussion and refreshments after the cleanliness drive

3.3.13 ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION

The Chairman of the GSPCB, Dr. Simon de Sousa, along with the Chairman of Karnataka Pollution Control Board visited M/s Sesa Goa Ltd., Codli mine on 12/10/2010. The Chairman, GSPCB also planted a sapling on this day to commemorate the World Environment Day. Plate 3F shows the Chairman, GSPCB planting a sapling on the occasion.

Plate 3m: Dr. Simon de Sousa, Chairman, GSPCB planting a sapling to commemorate the World Environment Day. Standing along are Chairman, Karnataka State Pollution Control Board, Mr. Mahesh Patil, General Manager, Environment, M/s Sesa Goa Ltd. and others.

3.3.14 TESTING OF NOISE LEVELS OF FIRE CRACKERS

The GSPCB conducted an exercise on Testing of Fire-Crackers and Fireworks available for sale in Goa MARKETS for compliance of noise level as per the fire cracker noise standards prescribed under Environment (Protection) Rules, 1986. The exercise was carried out through an MoEF approved laboratory in presence of the officials of GSPCB.

The crackers of different brands from various companies available in Goan markets were procured and were tested at the Fort Aguada Helipad, Candolim, Goa as per the procedure specified by CPCB for testing of fire-crackers. The exercise was conducted on 15 different 'Single

Crackers' for which maximum allowable decibel is 125 dB(A) and 3 different brands of 'Crackers in Series' for which maximum allowable decibel is 105 dB(A).

The findings of the noise monitoring exercise indicated that one of the 'Single Crackers' type of fire-crackers and two of the 'Crackers in Series' brands of fire-crackers were not meeting the stipulated noise standards. Also, the packagings of the fire-crackers do not indicate the noise level in decibel units and the chemical composition/ contents as required by the CPCB guidelines. The details of the fire-crackers and the monitoring conducted are given in Annexure X.

CHAPTER 4

HUMAN RESOURCES DEVELOPMENT

4.1 TRAINING / WORKSHOPS/ SEMINARS, ETC., ATTENDED BY BOARD OFFICIALS

During the year under report, the officials of the Board attended training programmes / workshops / seminars etc., organized by reputed Institutions across the Country as follows:

Sr. No.	Name & Designation of the Official	Title of the Seminar	Duration	Organizing Institute	Sponsoring Institute
1	Smt. Jenica Sequeira, Sci 'B'	"Basic Fundamentals of GCMS QP 2010" at Goa State Pollution control Board, Panaji (On site training)	29 th March -1 st April 2010	Toshvin Analytical	Toshvin Analytical
2.	Smt. Francisca Pereira, SA	"Basic Fundamentals of GCMS QP 2010" at Goa State Pollution control Board, Panaji (On site training)	29 th March -1 st April 2010	Toshvin Analytical	Toshvin Analytical
3.	Smt. Livia D'Silva, SA	"Basic Fundamentals of GCMS QP 2010" at Goa State Pollution control Board, Panaji (On site training)	29 th March -1 st April 2010	Toshvin Analytical	Toshvin Analytical
4.	Kum. Edma Fernandes, SA	"Basic Fundamentals of GCMS QP 2010" at Goa State Pollution control Board, Panaji (On site training)	29 th March -1 st April 2010	Toshvin Analytical	Toshvin Analytical
5.	Smt. Joshna M. Mahale, SA	"Basic Fundamentals of GCMS QP 2010" at Goa State Pollution control Board, Panaji (On site training)	29 th March -1 st April 2010	Toshvin Analytical	Toshvin Analytical
2.	Smt. Livia D'Silva, SA	"Fundamental , operation of GCMS & maintenance of GCMS"	25 th -27 th May 2010	Shimadzu Asia Pacific Ltd, Singapore	Shimadzu Asia Pacific Ltd, Singapore
3.	Kum. Edma Fernandes, SA	"Fundamental , operation of GCMS & maintenance of GCMS"	25 th -27 th May 2010	Shimadzu Asia Pacific Ltd, Singapore	Shimadzu Asia Pacific Ltd, Singapore

4.	Smt. Francisca Pereira, SA	Water use & Quality Criteria	20 th October 2010	Goa Science Centre Panaji	GSPCB
5.	Smt. Joshna M. Mahale, SA	Water use & Quality Criteria	20 th October 2010	Goa Science Centre Panaji	GSPCB
6.	Smt. Avina Pereira, SA	Water use & Quality Criteria	20 th October 2010	Goa Science Centre Panaji	GSPCB
7.	Smt. Joshna M. Mahale, SA	"Mairne GIS for coastal pollution management ICMAM"	22 nd - 25 th November 2010	ICMAM Project Directorate , Chennai	GSPCB
8.	Kum. Edma Fernandes, SA	"Mairne GIS for coastal pollution management ICMAM"	22 nd -25 th November 2010	ICMAM Project Directorate , Chennai	GSPCB
9.	Kum. Edma Fernandes, SA	Analysis pf Pesticides & other organic chemical in Environmental Samples	6 th -10 th December 2010	NEERI, Nagpur	GSPCB
10.	Shri Nilesh S. Parsekar, SA	Mesaurement uncertainty (Chemical Parameters)for Laboratories training course	16 th to 18 th Feburary 2011	Indian institute of quality management STQC, Jaupur (Oil Jaipur)	GSPCB
11.	Shri. Sanjay Kankonkar, SA	Mesaurement uncertainty (Chemical Parameters)for Laboratories training course	16 th to 18 th Feburary 2011	Indian institute of quality management STQC, Jaupur	GSPCB
12.	Smt. Nandan Prabhudessai, JEE	Pollution Control and waste Management Sugar & Distilleris	21th to 25th Feburary 2011	Vasantdada Sugar Institute, Pune	GSPCB
13.	Smt. Anny B. Dias, SA	Pollution Control and waste Management Sugar & Distilleris	21th to 25th Feburary 2011	Vasantdada Sugar Institute, Pune	GSPCB
14.	Smt. Jenica Sequeira, Sci 'B'	Meaurement of uncretarinty in chemical and Biological testing	23th to 25 th Feburary 2011	Indian Statistical Institute SQC & OR unit New Delhi	GSPCB
13.	Smt. Avina Pereira, SA	Meaurement of uncretarinty in chemical and Biological testing	23th to 25 th Feburary 2011	Indian Statistical Institute SQC & OR unit New Delhi	GSPCB

14.	Shri. Chaitanya. A. Salgaokar, SA	Water Quality Monitoring & Network Management	09 to 11 th March 2011	Central Pollution Control Board Zonal Office (South) Bangalore	GSPCB
15.	Shri. Keshav Naik, SA	Water Quality Monitoring & Network Management	09 to 11 th March 2011	Central Pollution Control Board Zonal Office (South) Bangalore	GSPCB

4.2 TRAINING IMPARTED BY THE BOARD TO STUDENTS FROM SCHOOLS / COLLEGES / OTHER EDUCATIONAL INSTITUTIONS

The Board laboratory provides free training to students from Schools, Colleges and other Educational Institutions. Training with respect to air and water sampling and analysis of environmental parameters are conducted for officials from industries after charging a fee. The trainings provided during the year are given in the following Table.

Table giving the details about the Training Programmes held by the Board

Sr. No.	Name of the Institute / Company / College / Individual given training	Title of the Training	Duration
1.	Ms. Fatima Clarinda Dias	Sampling & Analysis for the determination of SPM, RSPM, Oxides of Nitrogen and Sulphur Dioxide	25/08/2010
2.	Ms. Rohini R. Pagi		
3.	Ms. Rohini Ganpati Gaonkar		
4.	Ms. Corina Pereira		
5.	Ms. Fritz Fernandes		

Apart from the above training programme, five employees from the Water Resources Department were given training in the Board office on various topics such as sampling, assisting in conducting analysis and other office procedures.

4.3 REPATRIATION

During the year under report, the following Officials were repatriated back to their parent department.

Sr. No.	Name of the candidate	Designation	Department
1.	Shri R. J. Kamat	Env. Engg.	PWD
2.	Shri Sailesh Vaingankar	Jr. Env. Engg.	PWD

4.4 DEPUTATIONS IN THE BOARD

Shri. Arolkar (EE) was appointed as Environmental Engineer in the Board on deputation from P.W.D. during the year under report.

CHAPTER 5

OBJECTIVES & ACHIEVEMENTS

5.1 OBJECTIVES SET BY THE BOARD

The Board has planned to implement certain programmes for infrastructure development in specific areas. Following are some of the programmes wherein studies have been initiated and are at various stages of completion.

a. Inventorization of Hazardous Waste in the State of Goa

The work of 'Inventory on Hazardous Wastes' generated in the State of Goa was awarded to M/s Aditya Environmental Services, Mumbai. The consultants examined industrial processes of over 3000 units operating in Goa to get the facts and figures of the quantities of wastes generated under each category.

b. Environment Impact Assessment Study for Pilerne Industrial Estate

Following several complaints received from the Saipem Citizens' Action Committee and the public in general regarding the pollution caused by some industries operating in the Pilerne Industrial Estate, the Goa State Pollution Control Board has decided to conduct an Environmental Impact Assessment (EIA) study for Pilerne Industrial Estate and the areas surrounding the industrial estate within a distance of 1Km from the boundary of the industrial estate, through outsourcing. The work was awarded to M/s Sadekar Enviro Engineers Pvt. Ltd., Goa.

M/s Sadekar Enviro Engineers Pvt. Ltd. has submitted the final copy of the 'Work Report of EIA, Pilerne Industrial Area for Post Monsoon season'. The Saipem Villagers Anti Pollution Front had raised an objection regarding awarding the work to M/s Sadekar Enviro Engineers Pvt. Ltd. since the latter is acting as consultant to some industrial units at Pilerne industrial Estate. M/s Sadekar Enviro Engineers Pvt. Ltd. has replied to the objection by stating that the services were given only after the EIA study period was completed. The Saipem Villagers Anti Pollution Front was given one months time to submit any documentary evidence to prove their contention within 30 days.

c. Programs sponsored by CPCB

The CPCB has been supporting various programmes carried out by the Board. During the financial year 2009 - 2010, the Board received financial support to the tune of Rs. 2 Lakhs for each of the following studies carried out by the Board through outsourcing.

1. **Preparation of report on 'Strengthening of Goa State Pollution Control Board'.**
2. **Preparation of report on 'Status of Sewage Management in Goa'.**
3. **Preparation of report on 'Status of Municipal Solid Waste Management in Goa'.**
4. **Preparation of report on 'Status of Bio Medical Waste Management in Goa'.**
5. **Preparation of report on 'Status of Plastic Waste Management and Inventorization of Recycling Units in Goa'.**
6. **Preparation of report on 'Status of E-waste generation/ Management in Goa'.**
7. **Preparation of report on 'Status of Batteries (Waste Handling) in Goa as per Batteries Waste Management Handling Rules'**

The Draft Final Reports were submitted by the Consultants. The status of the studies is as follows:

1. **Preparation of report on 'Documentation on Strengthening of Goa State Pollution Control Board':** was awarded to M/s UPL who has submitted the same. The Report was scrutinized by the committee and approved for implementation.
2. **Preparation of report on 'Status of Sewage Management'; 'Status of Municipal Solid Waste Management' and 'Status of Bio Medical Waste Management':** These works were awarded to M/s Padmaja Aerobiologicals Pvt. Ltd., Mumbai. M/s Padmaja Aerobiologicals Pvt. Ltd. has submitted the Reports for all the three studies. The Reports are under the scrutiny of the committee.
3. **Preparation of report on 'Status of Plastic Waste Management and Inventorization of Recycling Units' and 'Status of E-waste generation/ Management':** The work of preparation of these Reports was awarded to M/s Padmaja Aerobiologicals Pvt.Ltd. and m/s UPL respectively. The Reports are under the scrutiny of the committee.
4. **Preparation of report on 'Status of Batteries (Waste Handling) as per Batteries Waste Management Handling Rules':** This work was awarded to M/s Aditya Environmental Services Pvt. Ltd. Report is submitted and is under the scrutiny of the Committee.

5.2 ACHIEVEMENTS MADE BY THE BOARD

In the recent years, the Goa State Pollution Control Board has made some achievements in the fields of human resource development and environmental pollution control. The achievements are listed below.

- **Recognition of the Board Laboratory by National Accreditation Board for Testing and Calibration Laboratories (NABL)**
Audit of GSPCB Laboratory under National Accreditation Board for Testing and Calibration Laboratories (NABL) was conducted by auditors appointed by NABL. The auditors recommended continuing the validity of NABL accreditation for one more year, i.e., upto September 2011 in the field of Chemical Testing in accordance with ISO/IEC 17025:2005. NABL has also approved four Authorised Signatories for issuing Analysis Test Reports.
- **Launching of the Xtended Green Node (XGN) Software**
The Goa State Pollution Control Board has introduced e-governance by adopting the Xtended Green Node (XGN) Software developed by the National Informatics Centre. The software has been fully customized to meet the requirements of GSPCB for the Water and Air Consent and Hazardous Waste modules which enable the industries to submit applications for CTE and CTO online. The applications for CTE and CTO are now processed online by the Board. Subsequently, during the year, the Bio-Medical Waste module was also launched, the customization of this software is in progress.
- **Inauguration of the GCMS**
The GSPCB procured a Gas Chromatograph Mass Spectrometer (GCMS) during the year from the funds obtained from MoEF, New Delhi, and installed the same in the

Board laboratory. The instrument is used for measurement of pesticides and oils in water/sediment samples. The GC uses a separation and quantification technique and these separated components are identified using the MS. The above facilities were inaugurated by Hon. Deputy Chief Minister on 12/07/2010.

- **MoU with Gujarat Pollution Control Board**

The GSPCB has signed a MoU with Gujarat Pollution Control Board with regard to the XGN online software on 12/01/2011. The Gujarat Pollution Control Board agreed to provide to the GSPCB whatever new developments made by NIC, Gujarat in the XGN software for Gujarat Board. The MoU was signed by the Chairmen of Goa and Gujarat Pollution Control Boards in the presence of Principle Secretary, Environment, Government of Gujarat.

Annexure I-A

LIST OF APPLICATIONS FOR CONSENTS TO ESTABLISH/OPERATE UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 AND AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 BIO-MEDICAL WASTE (MANAGEMENT & HANDLING) RULES, 1998 AND HAZARDOUS WASTE (MANAGEMENT & HANDLING) (AMENDMENT) RULES, 2000 PROCESSED AND APPROVED BY THE BOARD DURING THE YEAR 2010-11.

Table 1-a

The following applications were approved in pursuance of the recommendations made at the 29th meeting of the Re-constituted Technical Committee held on 05/04/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s. APS Water Industries, Verna Industrial Estate	Plastic water filters	NOC
2	M/s. Cazcar, Tivim Industrial Estate	Blended country liquor	NOC
3	M/s Mahalaxmi Aerated Water Industry, Socorro, Porvorim	Packaged drinking water	NOC (addl product)
4	M/s. Goa Coconut Products, Kakoda Industrial Estate	Coconut oil	NOC (addl product)
5	M/s. Vasudev Marbles, Pilerne Indl Estate	Cutting and polishing of natural marbles	Water & Air Consent New
6	M/s. Hi – Tech Press Tools, Kundaim Indl EState	Pressed components and fabrication	Air Consent New
7	M/s Datson Engineers, St. Jose De Areal	Aluminium Casting	Water & Air Consent New
8	M/s. Cadila Healthcare Ltd, Kundaim Indl Estate	Capsules (addl product)	Water Consent New
9	M/s Kundil Ispat Ltd., Khandepar	Operation of DG set	Air Consent New (D.G. set)
10	M/s Indian Oil Corporation Ltd (Aviation Fuel System) Dabolim	Storage of aviation fuel	Air Consent Renewal
11	M/s. N.S. Narvekar (Dry screening and Crushing plant at Kalay)	Iron ore	Air Consent Renewal
12	M/s. Hi – Tech Press Tools, Kundaim Indl EState	Pressed components and fabrication	Water Consent Renewal
13	M/s. Shivraj Accumulators, Bicholim Industrial Estate	Batteries and Battery plates	Water Consent Renewal
14	M/s. Hindustan Coca-Cola Beverages Pvt. Ltd., Verna Industrial Estate	Sweetened Carbonated beverages & Carbonated water	Water Consent Renewal
15	M/s. V. M. Salgaocar & Bro Pvt. Ltd (BNF Plant at Vagus)	Iron ore fines and lumps	Water Consent Renewal
16	M/s Diebold India Pvt Ltd, Tivim Indl Estate	ATM machines	Hazardous Waste Authorization
17	M/s Mahaganpati Clinical Laboratory, Pernem	Clinic	Bio-Medical Waste Authorization

Table 1-b

The following applications were approved in pursuance of the recommendations made at the 30th meeting of the Re-constituted Technical Committee held on 12/04/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Tycon Medical Devices Pvt Ltd, Verna Indl Estate	Sutures	NOC
2	M/s. Sam Star Electrics, Tivim Indl Estate	Electric panels	NOC
3	Shri Ganpat Krishna Gaude, Ponda	Wheat flour mill	NOC
4	M/s Golden Products (Goa), Ponda	Cashewnut shell liquid	NOC (modification)
5	M/s S. Kantilal & Co. Pvt Ltd, TC No. 16/49, Molha Advona Iron Ore Mine, Sanguem	Iron ore	NOC
6	M/s. S.R. Engineering, Kakoda Indl Estate	Repairing & servicing of vehicles	Water & Air Consent New
7	M/s Alpha Industries, Colvale Indl Estate	Steel fabrication work	Water & Air Consent New
8	M/s Rajeshwari Speciality Chem Pvt Ltd, Cuncolim Indl Estate	Alkylphenols	Water & Air Consent New
9	M/s Cosme Costa & Sons (Gaval Sonshi Mine), Pissurlem	Crude iron ore	Water & Air Consent New (expansion)
10	M/s. S.S.P Polymers, Kundaim Indl Estate	Plastic moulded products	Water Consent New
11	M/s. Desai Cement Co Pvt Ltd (RMC Plant), Navelim	Readymix concrete	Water Consent New (addl product)
12	M/s. Mandovi Metals Pvt Ltd, Kundaim Indl Estate	Operation of DG set	Air Consent New (DG set)
13	M/s. Kundil Alloys Pvt Ltd, Kundaim Indl Estate	Operation of DG set	Air Consent New (DG set)
14	M/s. Saukar Freezers, Sancoale Indl Estate	Ice blocks	Air Consent New
15	M/s. Shantadurga Bottling Company, Assagao	Aerated water and sweetened carbonated water	Air Consent New
16	M/s. South India Cashew Corporation, Kundaim Indl Estate	Cardanol, residol & surfactant	Water Consent New
17	M/s. Ajay Cashew Oil & Allied Products	Cashewnut shell liquid	Water Consent New
18	M/s. Libox Chem (I) Pvt Ltd, Kundaim Indl Estate	Potassium permanganate	Air Consent New & Water Consent Renewal
19	M/s Ajanta Industries, Ponda	Cashew kernels	Air Consent Renewal
20	M/s. Highland Holiday Homes Pvt Ltd, Candolim	hotel industry with 90 rooms	Water & Air Consent Renewal
21	M/s. Averina International Resorts Ltd, Holiday Inn Resort, Cavellossim	hotel industry with 203 rooms	Water & Air Consent Renewal
22	M/s. Fort Aguada Beach Resort,	hotel industry with 145	Air Consent Renewal

	Sinquerim	rooms	
23	M/s. The Indian Hotels Co. Ltd, Taj Exotica, Benaulim	hotel industry with 140 rooms	Water & Air Consent Renewal
24	M/s Wyeth Limited, Verna Indl Estate	Tablets	Water & Air Consent Renewal
25	M/s Cipla Limited, S-103 to S-105, S-107 to S-112, L-138, L-147, L-147/1 to L-147/4 & L-150, Verna Indl Estate	Tablets	Air Consent Renewal
26	M/s Cadila Healthcare Ltd, Kundaim Indl Estate	Agiolax & agiocar, tablets, anti-cancer vials & tablets, Capsules	Air Consent Renewal
27	M/s Karthik Inductions Ltd, Kundaim Indl Estate	MS ingots & runners/ riser	Air Consent Renewal
28	M/s Sunrise Electromelt, Cuncolim Indl Estate	CTD bars, angles, channels	Air Consent Renewal
29	M/s Puja Ferro Alloys Ltd, Cuncolim Indl Estate	Silico manganese/ ferro manganese	Water & Air Consent Renewal
30	M/s Global Ispat Ltd., Cuncolim Industrial Estate	M.S. Ingots, Runner riser	Water & Air Consent Renewal
31	M/s V. M. Salgaoncar & Bro Pvt. Ltd, BNF Plant at Vagus	Iron ore fines and lumps	Air Consent Renewal
32	M/s V. M. Salgaoncar & Bro Pvt. Ltd, Mobile Screening & Crushing Plants, Vagus	Iron ore fines and lumps	Water & Air Consent Renewal
33	M/s V. M. Salgaoncar & Bro Pvt. Ltd, Dry Screening & Loading Facility, Vagus	Iron ore fines and lumps	Air Consent Renewal
34	M/s Sesa Goa Ltd, Codli Group of Mine	Crude iron ore	Air Consent Renewal
35	M/s Sesa Goa Ltd, (Orasso Dongor), Bicholim	Crude iron ore	Air Consent Renewal
36	M/s Sesa Goa Ltd, (Mareta Sodo), Onda, Sattari	Crude iron ore	Air Consent Renewal
37	M/s Mineira Nacional Limitada (Cuddegavoril sodd Mine) – Santona, Sanguem	Iron ore	Air Consent Renewal
38	M/s Sociedade Timblo Irmaos Limitada (Copila Gaichem Paul mine), Sattari	Iron ore	Air Consent Renewal
39	Shri Hiralal Kodidas, Gogoro Ou Gulcan Dongor Mine, Sanguem	Iron ore	Air Consent Renewal
40	M/s M.S. Talaulikar & Sons Pvt Ltd, Sanjem Iron Ore Mine, Sanguem	Iron ore	Air Consent Renewal
41	M/s Sociedade Timblo Irmaos Limitada Quelchem Tour Tambdi mine, Bicholim	Iron ore	Air Consent Renewal
42	M/s Rajesh Timblo, Godbaem Ou Cuttiem Mine, Sanguem	Iron ore	Air Consent Renewal
43	M/s R.S. Shetye & Bros., Deulem Pissurlem Mine, Sattari	Iron ore	Air Consent Renewal

44	M/s Damodar Mangalji & Co Ltd, Marsodo Mine, TC No. 95/52, Pissurlem	Iron ore	Air Consent Renewal
45	M/s Damodar Mangalji & Co Ltd, Band Doncol Mine, TC No. 2/Fe/71, Pissurlem	Iron ore	Air Consent Renewal
46	M/s Panduronga Timblo Industrais, Sailetembo Iron Ore Mine, T.C. No. 143/53, Sanguem	Iron ore	Air Consent Renewal
47	M/s Panduronga Timblo Industrais, Advona Toleamati e Galliguro Iron Ore Mine, T.C. No. 87/53, Sanguem	Iron ore	Air Consent Renewal
48	M/s Panduronga Timblo Industrais, Bondra Advona Iron Ore Mine, T.C. No. 61/53, Sanguem	Iron ore	Air Consent Renewal
49	M/s Madachem Bat Mines Pvt Ltd, Bicholim	Iron ore	Air Consent Renewal
50	M/s S.R. Engineering, Kakoda Indl Estate	Repairing & servicing of vehicles	Hazardous Waste Authorization
51	M/s Rajeshwari Speciality Chem Pvt Ltd, Cuncoim Indl Estate	Alkylphenols	Hazardous Waste Authorization
52	M/s South India Cashew Corporation, Kundaim Indl Estate	Cardanol, residol & surfactant	Hazardous Waste Authorization
53	M/s Materniadde Dr. Antonio Pinto Do Rosario Hospital, Porvorim	Hospital	Bio-Medical Waste Authorization
54	M/s Disease Investigation Unit, Tonca	Clinic	Bio-Medical Waste Authorization
55	M/s Nagarsekhar Dental Clinic, Quepem	Dental clinic	Bio-Medical Waste Authorization
56	Dr. Archan Marlan D'mello e Vaz, St. Cruz	Dental clinic	Bio-Medical Waste Authorization
57	Dr. Gauri's Gynaec Clinic, Mapusa	Clinic	Bio-Medical Waste Authorization
58	M/s Vivus SMRC Heart Centre, Chicalim	Healthcare facility	Bio-Medical Waste Authorization
59	M/s Desai Clinic Home, Ponda	Clinic	Bio-Medical Waste Authorization
60	Dr. Seema Diwani Clinc, Curchorem	Clinic	Bio-Medical Waste Authorization
61	M/s Dragon Ink Tattoo Studio, Calangute	Tattoo	Bio-Medical Waste Authorization
62	M/s Goa Dental College & hospital, Bambolim	Dental clinic	Bio-Medical Waste Authorization
63	M/s Biomab Pharmaceuticals India Pvt Ltd, Verna Indl Estate	Pharmaceutical unit	Bio-Medical Waste Authorization

Table 1-c

The following applications were approved in pursuance of the recommendations made at the 31st meeting of the Re-constituted Technical Committee held on 19/04/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Manisha Plastics, Kundaim Industrial Estate	Plastic bags	NOC
2	M/s Sanil Food Processing Pvt. Ltd., Cuncolim Industrial Estate	Roasted Cashew Nuts	NOC
3	M/s Total Packaging, Corlim Industrial Estate	Mosquito Coils	NOC (esxpansion)
4	M/s Anup Singh Negi, Britona	Wine	NOC
5	M/s Cipla Ltd., Verna Industrial Estate	Installation of DG set	NOC (fro DG set)
6	M/s Babaji Baker's & Confectioners, Mapusa	Bakery products	NOC
7	M/s Lourenco Industries, Verna Industrial Estate	Marine deck machinery	NOC
8	M/s Bharati Handling Agency, Sancoale Industrial Estate	Fabrication unit	NOC
9	M/s Manoj Arts and Fabrication, Canacona	Idols of clay and steel.	NOC
10	M/s Sai Rubber Industries, Corlim Industrial Estate	Rubber moulded products	NOC
11	M/s. Chowgule & Co. Pvt. Ltd, Kundaim Indl Estate	Storage of raw material	Air Consent New
12	M/s Shunyata Arts Pvt. Ltd., Pilerne Industrial Estate	Printed cartons	Air Consent New
13	M/s PAM Synthetics Ltd., Verna Industrial Estate	Moulded and Extruded Rubber Products	Water & Air Consent New
14	M/s Orion Hotel, Porvorim	Hotel with 42 rooms	Water & Air Consent New
15	M/s Multy Electro Mechanical Works, Bethora Industrial Estate	Fans Stator windings	Water & Air Consent New
16	M/s Chowgule Industries Ltd., Aquem-Baixo	Servicing of Swaraj Mazda Vehicles	Water & Air Consent New
17	M/s Goa Formulation Ltd., Honda Industrial Estate	I.V.Fluid	Water & Air Consent Renewal
18	M/s Amiantit Fibre Glass India Pvt. Ltd., Navelim	GRP/FRP pipes and tanks	Air Consent Renewal
19	M/s Himachal Futuristic Communication Ltd., Verna Industrial Estate	Fibre optic cables	Water & Air Consent Renewal
20	M/s Goa Shipyard Ltd., Vasco da Gama	Shipbuilding & repairs	Air Consent Renewal
21	M/s Sesa Goa Ltd. (Sanquelim Group of mines), Sanquelim	Iron ore	Air Consent Renewal
22	M/s Marzook & Cadar Pvt. Ltd. (Devachi Ram Iron Ore mine),	Iron ore	Air Consent Renewal

	Sanguem		
23	M/s Salgaonkar Mining Industries Pvt. Ltd. (Tolem De Quela – Keli Iron Ore Mines)	Iron ore	Air Consent Renewal
24	M/s V.D.Chowgule (Costi Iron Ore Mine), Sanguem	Iron ore	Air Consent Renewal
25	M/s EMCO Goa Pvt. Ltd, Sanvordem	Barge loading jetty	Air Consent Renewal
26	M/s Mandovi Pellets (A Div of Chowgule & Co. Pvt. Ltd), Shiroda	Iron ore pellets	Water & Air Consent Renewal
27	M/s Goa Steel Ltd., Radhakrishna Industrial Estate, Bicholim	M.S.Ingots	Water & Air Consent Renewal
28	M/s Mangal Iron Ore Pvt. Ltd., Madkaim Industrial Estate	M.S.Ingots, Runners & Riser	Water Consent Renewal
29	M/s Apex Packing Products Pvt. Ltd., Kundaim Industrial Estate	Flexible Packaging Products from plastics and paper	Hazardous Waste Authorization
30	M/s Glenmark Pharmaceuticals Ltd., Kundaim Industrial Estate	Tablets	Hazardous Waste Authorization
31	M/s Shunyata Arts Pvt. Ltd., Pilerne Industrial Estate	Printed cartons	Hazardous Waste Authorization
32	M/s Crescent Fragrances Pvt. Ltd., Cuncolim Industrial Estate	Fragrance Compounds	Hazardous Waste Authorization
33	M/s Estrela Do Mar Beach Resort, Calangute	Hotel	Hazardous Waste Authorization
34	M/s Himachal Futuristic Communication Ltd., Verna Industrial Estate	Fibre optic cables	Hazardous Waste Authorization
35	M/s Goa Shipyard Ltd., Vasco da Gama	Shipbuilding & repairs	Hazardous Waste Authorization
36	M/s Mediline Pathological Laboratory, Porvorim	Patholab	Bio-Medical Waste Authorization
37	Dr. Shastry Child Care Clinic, Ponda	Clinic	Bio-Medical Waste Authorization
38	M/s Shree Dental Clinic, Valpoi	Dental Clinic	Bio-Medical Waste Authorization
39	Dr. Vivek Chodankar Clinic, Ponda	Clinic	Bio-Medical Waste Authorization
40	Dr. Naraina Edo, Alto, Betim	Clinic	Bio-Medical Waste Authorization
41	M/s. Bhagyodaya Hospital, Mapusa	Hospital	Bio-Medical Waste Authorization
42	Dr. Raikar's Pathology Laboratory, Margao	Patholab	Bio-Medical Waste Authorization

Table 1-d

The following applications were approved in pursuance of the recommendations made at the 32nd meeting of the Re-constituted Technical Committee held on 26/04/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s SR Plastic Industries, Kundaim Indl Estate	Plastic crushed powder	NOC
2	M/s Acoustic Components Pvt Ltd, Unit II, Plot no. 23, Tuem Indl Estate	Canopy door locks, hinges	NOC
3	M/s Teknic Controls, Verna Indl Estate	Minature & earth leakage circuit breakers, enclosures, electrical switches & accessories, plastic & metal parts	NOC
4	M/s Jai Mahalsa Industry, Verna Indl Estate	Pet bottles	NOC
5	M/s Balaji Metals, Madkaim Indl Estate	Installation of DG set	NOC (for DG set)
6	M/s Mach Tech Goa, Sancoale	Assembling of special purpose machines, assembling of electric furnace, electric transformers, moulds & dies metal	NOC, Water & Air Consent New
7	M/s Supreme Industries, Canacona Indl Estate	LLDPE/ HM/ HDPE bags & films	Water & Air Consent New
8	M/s Catalysts & Technologies, Cuncolim Indl Estate	Catalyst bed support, nickel catalyst & catalyst regeneration	Water & Air Consent New
9	M/s Damodar Mangalji & Co Ltd, Marsodo Mine, TC No. 33/53, Pissurlem	Iron ore	Water & Air Consent New (placed before Board)
10	M/s Hotel Park Plaza, Panaji	Hotel with 37 rooms	Water & Air Consent New
11	M/s PVP Meta Coats, Ponda	Powder coating on MS & aluminium items	Water Consent New
12	M/s Putzmeister Concrete Machine Pvt Ltd, Verna Indl Estate	Concrete pumps	Water & Air Consent Renewal
13	M/s Britacel Silicones Ltd, Kundaim Indl Estate	Textile finishing agents, lubricating preparation, silicone fluids, acrylic polymer emulsion	Water Consent Renewal
14	M/s Heritage Village Club, Arossim	Hotel with 97 rooms	Air Consent Renewal
15	M/s Chowgule & Co. Pvt. Ltd, Shipbuilding Division, Mormugao	Processing of steel plates	Air Consent Renewal
16	M/s Ravindra Tulsidas Deulkar, Careacodil Upri Adamtembo E Sauripar Mine, Sanguem	Iron ore	Air Consent Renewal
17	M/s G.N. Agrawal, Borchhi Mordi Mine, Quepem	Iron ore	Air Consent Renewal

18	M/s Sova, Odamolla Mine, Sanguem	Iron ore	Air Consent Renewal
19	M/s V.S. Dempo & Co Pvt Ltd, Curpem Mine, Sanguem	Iron ore	Air Consent Renewal
20	M/s V.S. Dempo & Co Pvt Ltd, Surla Sonshi Mine, Sanguem	Iron ore	Air Consent Renewal
21	M/s V.S. Dempo & Co Pvt Ltd, Colomba Mine, Sanguem	Iron ore	Air Consent Renewal
22	M/s Ramacanta V S Velingker (Corpadega Mine), Dharbandora	Iron ore	Air Consent Renewal
23	M/s J.L. Baptista, Sanguem	Basalt quarry	Air Consent Renewal
24	M/s Bandekar Brothers Pvt Ltd, Jaquela Ou Jacadevicho Mollo Mine	Iron ore	Water & Air Consent Renewal
25	M/s Hotel Silver Sands Beach Resort, Colva	Hotel	Hazardous Waste Authorization
26	Dr. Ganesh Memorial Clinic, Mapusa	Clinic	Bio-Medical Waste Authorization
27	Dr. Raiker's Pathology Laboratory, Margao	Patholab	Bio-Medical Waste Authorization
28	M/s Gomes Clinic, Mapusa	Clinic	Bio-Medical Waste Authorization
29	Dr. Tilve's Clinic, Porvorim	Clinic	Bio-Medical Waste Authorization
30	M/s Correia Afonso Hospital, Benaulim	hospital	Bio-Medical Waste Authorization
31	Dr. Parag Prabhudessai, Panaji	Dental Clinic	Bio-Medical Waste Authorization
32	Dr. Preeti Prabhudessai, Panaji	Dental Clinic	Bio-Medical Waste Authorization
33	M/s Microlab, Mapusa	Clinic	Bio-Medical Waste Authorization
34	M/s Shantadurga Pathological Laboratory, Cuncolim	Clinic	Bio-Medical Waste Authorization
35	Dr. Roque Ribeiro's Clinic, Porvorim	Clinic	Bio-Medical Waste Authorization
36	The Primary Health Centre, Shiroda	Health centre	Bio-Medical Waste Authorization
37	Dr. Czarina Beatriz Monteiro e Coutinho, Margao	Clinic	Bio-Medical Waste Authorization
38	M/s Supreme Industries, Canacona Indl Estate	LLDPE/ HM/ HDPE bags & films	Plastic Registration

Table 1-e

The following applications were approved in pursuance of the recommendations made at the 33rd meeting of the Re-constituted Technical Committee held on 03/05/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s CMM Logistics Pvt Ltd,	Warehousing &	NOC

	Merces	commercial premises	
2	M/s Alcrafts, Tivim Indl Estate	Aluminium frames, painting/ powder coating	NOC
3	M/s Xec Cadar Xec Usman, T.C. No. 25/1956, Carpadega Codli Mine, Sanguem	Iron ore	NOC
4	M/s Sesa Goa Ltd, Botvadecho Dongor Iron Ore Mine, Pissurlem	Iron ore	NOC (expansion)
5	M/s FDC Ltd, L-56/57, Verna Indl Estate	Tablets	Air Consent New (for DG set)
6	M/s Kadamba Tourist Home, Merces	Hotel	Water Consent New
7	M/s Pawan Infrastructure, Pernem	Crushed metal and Asphalt	Water & Air Consent New
8	M/s Universal Cables Ltd (Unit Optic Fibre Goa), Verna Indl Estate	Optical fibre cables & allied products	Water Consent Renewal
9	M/s FDC Ltd, Unit III, L-121 B, Verna Indl Estate	Tablets	Water & Air Consent Renewal
10	M/s Caculo Cars Pvt Ltd, Verna Indl Estate	Servicing of vehicles	Water & Air Consent Renewal
11	M/s Surekleen Services Pvt Ltd, Pilerne Indl Estate	Laundry service	Water & Air Consent Renewal
12	M/s Zeolites & Allied Products Pvt Ltd, Cuncoim Indl Estate	Zeolites molecular sieves	Water & Air Consent Renewal
13	M/s V.M. Salgaocar & Bros Pvt Ltd, Sigao Mine, Sanguem	Iron ore	Air Consent Renewal
14	M/s Rajaram Bandekar Sirigao Mines Pvt Ltd, Monte-de-Sirigao Mine, Bicholim	Iron ore	Air Consent Renewal
15	M/s Sociedade Timblo Irmaos Limitada Cormolem e Bog Harvalem mine, Bicholim	Iron ore	Air Consent Renewal
16	M/s Chowgule & Co. Pvt Ltd, Sirigao Iron Ore Mine, Bicholim	Iron ore	Air Consent Renewal
17	M/s Manuel Da Costa, Sanguem	Basalt Quarry	Air Consent Renewal
18	M/s Sesa Goa Ltd, Cudnem Beneficiation Plant, Bicholim	Processing of Iron ore	Water & Air Consent Renewal
19	M/s Nicomet Industries Ltd, Cuncoim Indl Estate	Barge repairs	Water Consent Renewal
20	M/s Priya Engineering Works, Loutolim	Cobalt, Copper & nickel, zinc	Hazardous Waste Authorization
21	M/s Britacel Silicones Ltd, Plot No. 56/57, Verna Indl Estate	Silicone emulsions, fluid, cationics	Hazardous Waste Authorization
22	M/s Patel Petro Pvt. Ltd., Kolhapur, Maharashtra	Collection & transportation of used oil from Goa to Maharashtra	Hazardous Waste Authorization

Table 1-f

The following applications were approved in pursuance of the recommendations made at the 34th meeting of the Re-constituted Technical Committee held on 10/05/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Agnelo Lime Industry, Cuncolim Indl Estate	Lime powder (sea shell)	NOC
2	M/s Shivam Villa Pvt Ltd, Sanguem	Stacking & processing of iron ore	NOC
3	M/s Meta Copper & Alloys Ltd, Zuarinagar	Copper alloy cups & discs	NOC (expansion)
4	The Commanding Officer, INS, Hansa, Dabolim	Setting up R.O. plant for domestic use	NOC (for R.O. plant)
5	M/s Sterling Developers, Calangute	Hotel	NOC
6	M/s Ashwini Pharmaceuticals, Cumbharjua	Pharmaceutical products (liquid formulation)	Water Consent New
7	M/s Vimani Engineering Works, Sancoale	Barge repair/ barge fabrication/ dry dock	Water Consent New
8	M/s A.W. Faber-Castell (I) Pvt. Ltd., Corlim	Textliners highlighters, textliners refill bottle, stamp pad ink, eraser	Air Consent New
9	M/s A.W. Faber-Castell (I) Pvt. Ltd., Corlim	Textliners highlighters, textliners refill bottle, stamp pad ink, eraser	Water Consent Renewal
10	M/s Bogmallo Beach Resort, Bogmallo	Hotel	Water & Air Consent Renewal
11	M/s Elray Minerals & Co. Aili Vagurbem Mine, Sanguem	Iron ore	Air Consent Renewal
12	M/s V.M. Salgaocar Sales International, Mobile screening plants, Vagus	Mobile screening plants	Air Consent Renewal
13	M/s Permos Stone Crusher, St. Jose de Areal	Stone crusher	Air Consent Renewal
14	M/s Bogmallo Beach Resort, Bogmallo	Hotel	Hazardous Waste Authorization
15	M/s Britacel Silicones Ltd, Plot No. L-124, Verna Indl Estate	Silicone emulsions, fluid, cationics	Hazardous Waste Authorization
16	M/s Vimani Engineering Works, Sancoale	Barge repair/ barge fabrication/ dry dock	Hazardous Waste Authorization

Table 1-g

The following applications were approved in pursuance of the recommendations made at the 35th meeting of the Re-constituted Technical Committee held on 31/05/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Chowgule Real Estate &	Residential complex of	Water Consent New

	Construction Co. Pvt. Ltd., Salvador-do-Mundo, Bardez	58 apartments	(for STP)
2	Institute of Hotel Management Catering Technology & Applied Nutrition, Alto Porvorim	Catering institute	Water & Air Consent New
3	M/s Goa Tourism Development Corporation Ltd. (Panaji Residency), Panaji	Hotel	Water & Air Consent New
4	M/s Watson Pharma Pvt Ltd., Verna Indl Estate	Tablets & capsules	Water & Air Consent Renewal
5	M/s Oriental Containers Ltd, Kundaim Indl Estate	Plastic caps	Water & Air Consent Renewal
6	M/s Zaraf Cosmetics Pvt Ltd, Moirá	Cream & lotion	Water & Air Consent Renewal
7	M/s Cosme Remedies Ltd, Alto Betim, Bardez-Goa	Tablets	Air Consent Renewal
8	M/s Universal Cables Limited, Unit: Optic Fibre Goa, Verna Indl Estate	Optical fibre cables & allied products	Air Consent Renewal
9	M/s Cartini India Limited, Madkai Indl Estate	Padlocks, keys, latches	Air Consent Renewal
10	Smt. Geetabala Manohar Naik Parulekar (Guellim e Gaval (Pissurlem) Mine), Pissurlem	Iron ore	Air Consent Renewal
11	M/s R. K. Crushing Industries, St. Jose de Areal	Stone crusher	Air Consent Renewal
12	M/s Shubhashree Tin Works, Kundaim Industrial Estate	Tin Containers and CRCA Containers	Water Consent Renewal
13	M/s Nanutel Hotel, Margao	Hotel	Water Consent Renewal
14	M/s s Hotel Vila Goesa Beach Resort, Calangute	Hotel	Water & Air Consent Renewal

Table 1-h

The following applications were approved in pursuance of the recommendations made at the 36th meeting of the Re-constituted Technical Committee held on 08/06/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Sesa Goa Ltd. (Dry Screening Plant at Codli Plant 3C), Codli	Iron ore	NOC
2	M/s Primo Bom Terra Verde, Calangute	Hotel	Water Consent New
3	M/s Vimani Engineering Works, Sancoale	Barge repair/ barge fabrication/ dry dock	Air Consent New
4	M/s Bandekar Bros. Pvt Ltd, mobile jaw crushing plant QJ 240 & mobile screening plant QA-340 at Bicholim	Iron ore lumps	Air Consent New
5	M/s V.M. Salgaocar Sales	Mobile screening plants	Water Consent

	International, Mobile screening plants, Vagus		Renewal
6	M/s Goenca Resorts Pvt Ltd, Resort Marinha Dourado Rsesorts, Arpora	Hotel	Air Consent Renewal
8	M/s Goa Glass Fibre Ltd, Colvale	Chopped strand mat, rovings, woven rovings, chopped strand	Air Consent Renewal
9	M/s Cipla Ltd, S-103 to 105, S-107 to S-112, L-138, L-147, L-147/1 to L-147/4 & L-150, Verna Indl Estate	Tablets, capsules, liquid orals, nasal spray, injectables & topical preparation	Water Consent Renewal
10	M/s Cipla Ltd, L-139 to L-146, Verna Indl Estate	Tablets & capsules	Water & Air Consent Renewal
11	M/s Marksans Pharma Ltd, Verna Indl Estate	Tablets & capsules	Water & Air Consent Renewal
12	M/s Glenmark Generics Ltd, Colvale Indl Estate	Tablets, capsules & ointments	Water & Air Consent Renewal
13	M/s Rukminirama Steel Rollings Pvt Ltd, Melting Division, L-17, Cuncolim Indl Estate	MS ingots, runner/ riser	Air Consent Renewal
14	M/s Colgate Palmolive (India) Ltd, Kundaim Indl Estate	Transportation & disposal of ETP sludge & Waste cream/ off specification products from Goa to ACC Wadi Cement Works, Karnataka	Permission for Transportation & disposal of ETP sludge & Waste cream/ off specification products from Goa to ACC Wadi Cement Works, Karnataka
15	M/s United Lead-Oxide Products Pvt. Ltd., Kundaim Indl Estate	Lead acid batteries, battery plates & lead oxide	Hazardous Waste Authorisation
16	M/s Reliable Enterprises, Nashik	Transportation of hazardous waste from Goa to TSDF/ recyclers, reprocessor/ ACC Cement Works for disposal	Hazardous Waste Authorisation
17	M/s Meghani Enterprises, Thane, Maharashtra	Collection & transportation of used oil & waste oil from Sesa Goa Ltd. to Maharashtra	Hazardous Waste Authorisation

Table 1-i

The following applications were approved in pursuance of the recommendations made at the 37th meeting of the Re-constituted Technical Committee held on 14/06/10

Sr. No	Name of the unit & location	Application cleared for
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1	M/s Nestle India Ltd, Ponda	Wafers	NOC (expansion)
2	M/s Intech Pharma Pvt. Ltd., Pernem	Methyl bromide & chloropicrin	NOC (expansion)
3	M/s Caculo Motors Pvt Ltd, Verna Indl Estate	Servicing of cars	NOC
4	M/s Cipla Ltd, L-139 to L-146, Verna Indl Estate	Up-gradation of ETP	NOC (for up-gradation of ETP)
5	M/s Vergo Pharma Research, Verna Indl Estate	Research & Development of tablets, capsules & oral suspension	Water & Air Consent New (extension of validity)
6	M/s Furtado, Quepem	Stone crusher	Air Consent New
7	M/s Timblo Enterprises, Caurem Beneficiation Plant, Sanguem	Iron ore fines & lumps	Air Consent New and Water Consent Renewal
8	M/s Chowgule & Co. Pvt. Ltd., Pale Mine, Bicholim	Iron ore	Water Consent Renewal
9	M/s Kunda R.S. Gharse, Tollem Group of Mines, Sanguem	Iron ore	Air Consent Renewal
10	M/s Lithoferro, Calsanichomato de Oilomol Mine, Bicholim	Iron ore	Air Consent Renewal
11	M/s Manuel Da Costa, 5/basalt/89, Sanguem	Basalt quarry	Air Consent Renewal

Table 1-j

The following applications were approved in pursuance of the recommendations made at the 38th meeting of the Re-constituted Technical Committee held on 21/06/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Essel Propack, Kundaim Indl Estate	Multilayered collapsible laminated tubes	NOC (expansion)
2	M/s Dylane Shipping, Sancoale	Shipbuilding & ship repairs	NOC
3	M/s Syngenta (I) Ltd – (Liquid Waste Incinerator 2600 tpm) – Corlim	Pesticides and agro chemicals	Water & Air Consent New (extension of validity of Liquid Waste Incinerator)
4	M/s Rajaram Bandekar Mines Pvt Ltd, Mobile Dry Screening Plant & Garage, Sirigao	Mobile Dry Screening Plant & Garage	Water & Air Consent New
5	M/s Ramacanta Velingkar, Beneficiation Plant at Shirval Culna, Dharbandora	Processing of iron ore lumps & fines	Air Consent New
6	Smt. Berta de Rego e Fernandes, Mortegal Mordi Mine, Sanguem	Iron ore	Air Consent Renewal
7	M/s Sanofi Synthelabo (India) Ltd, Verna Indl Estate	Research & Development on pharmaceutical product	Air Consent Renewal

		i.e. tablet & capsule formulation	
8	M/s Syngenta (I) Ltd – (Crop Protection Sector) – Corlim	Pesticides and agro chemicals	Air Consent Renewal
9	Shri. Aleixo Manuel C.P. Da Costa, Sem Denominacao Especial Mine, Sanguem	Iron ore	Air Consent Renewal

Table 1-k

The following applications were approved in pursuance of the recommendations made at the 39th meeting of the Re-constituted Technical Committee held on 28/06/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Tata Consultancy Services Ltd, Tivim Indl Estate	Installation of STP	NOC (for STP)
2	M/s Sesa Goa Ltd., Dry Screening Plants 1B & 1C at Amona	Iron ore	NOC (for dry screening plants)
3	M/s Siemens Ltd, Plot no. C21, C23, C25 & C26, Verna Indl Estate	Primary & secondary gas insulated substation and compact substation	NOC
4	M/s Akar Heights, Sancoale	Residential complex	NOC
5	M/s Andrew Telecommunications India Pvt Ltd, Verna Indl Estate	FXL cable	Water & Air Consent New (for expansion)
6	M/s Vivek Cement Castings, Margao	Cement concrete products	Water & Air Consent New
7	M/s Samatma Estates Pvt Ltd, Hotel Summit, Panaji	Hotel	Water & Air Consent New
8	M/s Ranjana Overseas Pvt Ltd, Holiday Homes, Varca	Hotel	Water & Air Consent New
9	M/s Manuel Da Costa, 5/basalt/89, Sanguem	Basalt quarry	Water Consent New
10	M/s Prestige Holiday Resorts Pvt Ltd, Royal Palms, Benaolim	Hotel	Water & Air Consent Renewal
11	M/s Teracom Ltd, Kundaim Indl Estate	CDMA equipments, modems, cell phones, feeder cables, VRLA batteries, integrated digital microwave equipments, CLIP phones	Water & Air Consent Renewal
12	M/s Mangal Iron Pvt Ltd, Madkai Indl Estate	MS ingots, runner/ riser	Air Consent Renewal
13	M/s Damodar Mangalji & Co. Ltd, Ambeavalem Bharad Mine, Bicholim	Iron ore	Air Consent Renewal
14	M/s Nicomet Industries Ltd, (Cake Washing Plant) Cuncolim Indl Estate	Cake washing plant	Water & Air Consent Renewal

15	M/s V.M. Salgaocar & Bro. Pvt. Ltd, Surla Office, Bicholim	Iron ore	Hazardous Waste Authorisation
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Table 1-l

The following applications were approved in pursuance of the recommendations made at the 40th meeting of the Re-constituted Technical Committee held on 05/07/10

Sr. No	Name of the unit & location	Hotel	Application cleared for
1	M/s V.S. Morajkar, Pernem	Crusher	NOC
2	M/s Acron Developers Pvt Ltd, Acron Villa Julieta, Arpora	Residential complex	NOC
3	M/s Crompton Greaves Ltd, Shed no. D2/21, 22 & 23, Tivim Indl Estate	Electric motors	NOC
4	M/s Tantra Designs Pvt Ltd, Mormugao	Hotel	Water and Air Consent New
5	M/s Palette Hotels (India) Pvt Ltd, Mormugao	Hotel	Water and Air Consent New
6	Shri. Anant Udyog, Ponda	Cashew kernels	Water and Air Consent New
7	M/s Lupin Limited, Verna Indl Estate	Tablets & capsules	Water and Air Consent New (expansion)
8	M/s Mahindra Holiday & Resorts India Ltd (Club Mahindra), Varca	Hotel	Water and Air Consent Renewal
9	M/s GKB Hi-Tech Lenses, Tivim Indl Estate	Ophthalmic lenses	Water Consent Renewal
10	M/s Lupin Limited, Verna Indl Estate	Tablets & capsules	Water and Air Consent Renewal

Table 1-m

The following applications were approved in pursuance of the recommendations made at the 41st meeting of the Re-constituted Technical Committee held on 12/07/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Navelkar Landmarks, Candolim	Hotel	NOC (for expansion)
2	M/s Aventis Pharma Ltd, Verna Indl Estate	Tablets & capsules	NOC (for expansion)
3	M/s Epoxy Coat Industries, Tivim Indl Estate	Powder coating on metal & glass, spray painting on vehicles	Water and Air Consent New
4	M/s Shubhankar Heritage, Karmali	Hotel	Water and Air Consent New
5	M/s Baba Hotels Pvt. Ltd, Calangute	Hotel	Water and Air Consent New
6	M/s Goa's Pearl Guest House, Nerul	Hotel	Water and Air Consent New
7	M/s Western India Shipyard, Mormugao	Steel structure, jigs fixtures, ship parts	Water and Air Consent Renewal

8	M/s Sanofi Synthelabo (India) Ltd, Verna Indl Estate	Research & Development on pharmaceutical product i.e. tablet & capsule formulation	Water Consent Renewal
9	M/s Epoxy Coat Industries, Tivim Indl Estate	Powder coating on metal & glass, spray painting on vehicles	Hazardous Waste Authorisation
10	M/s Zuari Industries, Zuarinagar	Fertilisers	Extension in storage period of chromium bearing spent catalyst under HWA

Table 1-n

The following applications were approved in pursuance of the recommendations made at the 42nd meeting of the Re-constituted Technical Committee held on 19/07/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s R.B.S. Candiaparcas, Pissurlem Indl Estate	Cement products such as blocks, bricks, pavers	NOC
2	M/s FDC Ltd. Unit I & II, Verna Indl Estate	Up-gradation of ETP & plant building	NOC (for up-gradation of ETP & plant building)
3	M/s Birla Furukawa Fibre Optics Ltd, Verna Indl Estate	Optical fibres & fibre ribbon	Water and Air Consent New
4	M/s Acron Developers Pvt Ltd, Villa Vera, Arpora	Residential complex	Water and Air Consent New
5	M/s Cartini India Ltd, D6/E3, Madkaim Indl Estate	Locks & keys	Water Consent Renewal
6	M/s Teracom Limited, Kundaim Indl Estate	Conductors, wires & allied products	Water Consent Renewal
7	M/s United Lead-Oxide Products Ltd., Kundaim Indl Estate	Lead acid batteries, battery plates & lead oxide	Water and Air Consent Renewal
8	M/s IFB Industries Ltd, Corlim Indl Estate	Cabinets for fully automatic washing machines	Air Consent Renewal
9	M/s V.D. Chowgule, Vaguriem Mine, Sattari	Iron ore	Air Consent Renewal
10	M/s MRF, Ponda	Tubes for tyres	Hazardous Waste Authorisation

Table 1-o

The following applications were approved in pursuance of the recommendations made at the 43rd meeting of the Re-constituted Technical Committee held on 26/07/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Acord Laboratories, Madkai	R & D and private testing	NOC

	Indl Estate	Laboratory	
2	M/s Perfect Laundry & dry Cleaners, Verna Indl Estate	Laundry & Dry Cleaning	NOC
3	M/s S. N. Associates & Builders Pvt Ltd (Ocean Grove Apartments), Vanelim - Colva	Residential Complex	NOC
4	M/s Goa Microcellular Industry, Corlim Industrial Estate	Rubber sheets and moulded parts	Air Consent New
5	M/s Kundil Alloys Pvt Ltd, Kundaim Indl Estate	Installation of air pollution control System	Air Consent New (for modification)
6	M/s La Capitol, Panaji	Hotel	Water & Air Consent New
7	M/s Veeniola Guest House, Cavelossim	Hotel	Water Consent New
8	Shri Manuel Da Costa, Periudok, Santona, Sanguem	Basalt quarry	Water Consent New
9	M/s Indoco Remedies Ltd (Plant – I), Verna Indl Estate	Liquid orals, tablets, ointments and lotions	Water Consent Renewal
10	M/s Teracom Ltd, Kundaim Indl Estate	Optical fibre/cable/ accessories, CDMA fixed wireless terminals and phones, fiber reinforced plastic rods, insulated wires and cables, bare aluminium/ copper conductors, DWDM optical equipment	Air Consent Renewal
11	M/s Cartini India Ltd, Madkaim Indl Estate	Locks and parts of locks and keys	Air Consent Renewal

Table 1-p

The following applications were approved in pursuance of the recommendations made at the 44th meeting of the Re-constituted Technical Committee held on 02/08/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Neelam Hotels Pvt Ltd, Neelams The Glitz, Calangute	Hotel	NOC
2	M/s Salitho Ore Pvt Ltd.(Purmar-e-Parvedat Iron Ore Mine), Pale, Bicholim	Iron ore	Water & Air Consent New
3	Smt. Geetabala Manohar Naik Parulekar, Gulliem e Gaval Pissurlem Mine, T.C. No. 55 of 24/08/1951, Sattari	Iron ore	Amendment in the Consent
4.	M/s Apollo Victor Hospitals, Margao	Hospital	Bio-Medical Waste authorisation

Table 1-q

The following applications were approved in pursuance of the recommendations made at the 45th meeting of the Re-constituted Technical Committee held on 09/08/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	Shri. Sandesh Karmali, Oilemoll, St. Jose de Areal	Stone crusher	NOC (shifting)
2	M/s Gail (India) Limited, Belapur, Navi Mumbai		NOC
3	M/s Alphagam Coasting Solutions Pvt. Ltd, Bicholim Indl Estate	Powder coating	Water & Air Consent New
4	M/s Tiger Sheet Metal Works, Corlim Indl Estate	Vehicle body building & fabrication	Water & Air Consent New
5	M/s Procter & Gamble Hygiene & Health Ltd, Kundaim Indl Estate	Sanitary napkins	Water & Air Consent New (expansion)
6	M/s Adwalpalkar Resorts, Jewel Inn & Spa, Calangute	Hotel	Water & Air Consent New
7	M/s Joecons Beach Resort, Benaulim	Hotel	Water & Air Consent New
8	M/s Ria Hospitality Pvt. Ltd, Calangute	Hotel	Water & Air Consent New
9	M/s V.S. Dempo & Co. Ltd, Beneficiation Plant at Borcotem, Molem, Sanguem	Iron ore concentrates	Air Consent New
10	M/s Micro Labs Ltd, Verna Indl Estate	Capsules & tablets	Water & Air Consent Renewal
11	M/s Starflex Sealing India Pvt Ltd, Verna Indl Estate	Jointing sheets, braided packing & spiral wound gaskets	Water & Air Consent Renewal
12	M/s Merck Ltd, Ponda	Injectables, capsules	Water & Air Consent Renewal
13	M/s Whispering Palms Beach Resort, Candolim	Hotel	Air Consent Renewal
14	M/s Rajesh Timblo, Godbaim Curpem Mine, Sanguem	Iron ore	Water Consent Renewal
15	M/s Dempo Mining Corpn Pvt Ltd, Bicholim Iron Ore Mine	Iron ore	Air Consent Renewal
16	M/s MRF Ltd, Unit I, Ponda	Tyres & flaps	Water Consent Renewal
17	M/s MRF Ltd, Unit II, Ponda	Tubes	Water Consent Renewal
18	M/s Ambey Metallic Ltd, Pissurlem Indl Estate	Sponge iron	Water Consent Renewal
19	M/s Cadila Heath Care Ltd, Kundaim Indl Estate	Pharma unit	Hazardous Waste Authorisation
20	M/s Adwalpalkar Resorts, Jewel Inn & Spa, Calangute	Hotel	Hazardous Waste Authorisation

Table 1-r

The following applications were approved in pursuance of the recommendations made at the 46th meeting of the Re-constituted Technical Committee held on 16/08/10

Sr. No	Name of the unit & location	Products	Application cleared for
1	M/s Army Welfare Housing Organization, Chimbél	Residential complex	NOC
2	M/s Goan Real Estate & Construction Pvt. Ltd, Aldeia de Goa, Phase I, Bambolim	Residential complex	Water Consent Renewal
3	M/s Alcon Cement Company Pvt Ltd, Bicholim	Portland slag cement, ground granulated blast furnace slag	Water Consent Renewal
4	M/s Vinicola Pvt. Ltd, Margao	Wine	Water & Air Consent Renewal

Table 1-s

The following applications were approved in pursuance of the recommendations made at the 47th meeting of the Re-constituted Technical Committee held on 30/08/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Imperial Distilleries & Vitners Pvt Ltd, Kundaim Indl Estate	Blending & bottling of IMFL	NOC
2	M/s Santana Beach Resort, Candolim	Hotel	Water & Air Consent New
3	M/s Hotel Colva Kinara, Colva	Hotel	Water & Air Consent New
4	M/s Vailankani Cottages, Colva	Hotel	Water & Air Consent New (expansion)
5	M/s Goan Real Estate & Construction Pvt. Ltd, Phase V, Aldeia de Goa, Bambolim	Residential complex	Water Consent New
6	M/s Sigma Laboratories, Tivim Indl Estate	Tablets & capsules	Water & Air Consent Renewal
7	M/s Indoco Remedies Ltd, Plant-II, Plot no. L-32, 33, 34, Verna Indl Estate	Injectables	Water & Air Consent Renewal
8	M/s Abbott India Limited, Verna Indl Estate	Oral liquids & tablets	Water & Air Consent Renewal
9	M/s Marpol Pvt Ltd, Plot no. 12 to 18, Kakoda Indl Estate	Powder coating, polyester resin, curing agent A & B	Water & Air Consent Renewal
10	M/s Goa Ispat Ltd, Madkaim Indl Estate	CTD bars, angle channels	Water Consent Renewal
11	M/s Asra, Mapusa	Cement concrete, cement blocks	Water Consent Renewal
12	M/s Impala Distillery & Brewery Ltd, Assolda	Wine	Water Consent Renewal
13	M/s V.M. Salgaocar & Bro Pvt. Ltd, Dry screening plant & loading facility at Vagus, Bicholim	Iron ore lumps & fines	Water Consent Renewal
14	M/s Villa Eva, Siolim	Hotel	Water Consent Renewal
15	M/s Haidar Kassim Khan, Vangi	Iron ore	Air Consent Renewal

	Bindi Advona Mine, Quepem & Sanguem		
16	M/s Indoco Remedies Ltd, Plant-I, Plot no. L-14, Verna Indl Estate	Liquid orals, tablets, ointments and lotions	Air Consent Renewal
17	M/s Daulat Metals, Pernem	Crusher	Air Consent Renewal
18	M/s Osmo Orient Printing Machines Pvt. Ltd, Dhargal	Printing machines	Amendment in Consent to Establish (NOC)
19	M/s Asra, Mapusa	Cement concrete, cement blocks	Hazardous Waste Authorisation
20	M/s Hotel Colva Kinara, Colva	Hotel	Hazardous Waste Authorisation
21	M/s Sigma Laboratories, Tivim Estate	Tablets & capsules	Hazardous Waste Authorisation
22	M/s Indoco Remedies Ltd, Plant-II, Plot no. L-32, 33, 34, Verna Indl Estate	Injectables	Hazardous Waste Authorisation
23	M/s MRF, Unit 1, Ponda	Tyres & flaps	Hazardous Waste Authorisation
24	M/s Mahindra Holiday & resorts India Ltd, Club Mahindra, Varca	Hotel	Hazardous Waste Authorisation
25	M/s Shiva Petro-Synth Specialities Ltd, Thane, Maharashtra (Recycler)	Collection & transportation of used oil from Goa. to Maharashtra	Hazardous Waste Authorisation

Table 1-t

The following applications were approved in pursuance of the recommendations made at the 48th meeting of the Re-constituted Technical Committee held on 06/09/10

Sr. No	Name of the unit & location	Product	Application cleared for
1	M/s Shri Balaji Minerals, Pissurlem Indl Estate	Electrolytic manganese dioxide	NOC
2	M/s Sea Horse Resort, Arpora	Hotel	NOC
3	M/s Krishna Industries, Kundaim Indl Estate	Plastic granules	Air Consent New
4	M/s Dairy Designers, Margao Indl Estate	Yoghurt	Water Consent New
5	M/s D.B. Enterprises, Tuem Indl Estate	Electric panel board	Water & Air Consent New
6	M/s Polynova Industries Ltd, Kundaim Indl Estate	Artificial leather	Water Consent Renewal
7	M/s United Breweries Ltd, Ponda	Beer	Air Consent Renewal
8	M/s Old Anchor, Cavelossim	Hotel	Air Consent Renewal
9	M/s Hotel Fidalgo, Panaji	Hotel	Water & Air Consent Renewal
10	M/s V.M. Salgaocar & Bro. Pvt. Ltd., Velguem Surla Mine	Iron ore	Water & Air Consent Renewal
11	M/s Virginia Maria Simoes, Coti Dongor Pirla Mine, Quepem	Iron ore	Air Consent Renewal
12	M/s Sociedade Timblo Irmaos	Iron ore	Water & Air Consent

	Limitada, Dignem Mine, Bicholim		Renewal
13	M/s Noor Mohammed Abdul Karim, Oiteiro Divodgal Curdi Mine, Sanguem	Iron ore	Air Consent Renewal
14	M/s Baddruddin H. Mavani, Nomoxitembo de Caurem mine, Sanguem	Iron ore	Air Consent Renewal
15	Smt. Kunda Gharse, Carcareatemb Bombad Mine, Sanguem	Iron ore	Air Consent Renewal
16	Shri. Gajanan S. Padiyar, Vagxepe Dando Amabeya Temb Molcornem Mine, Quepem	Iron ore	Water & Air Consent Renewal
17	Shri. H.L. Nathurmal, Oilem Arvalem Mine, Bicholim	Iron ore	Water & Air Consent Renewal
18	M/s Chowgule & Co. Ltd, Central Workshop, Usgaon	Workshop for overhauling machinery 7 unic crane division	Water Consent Renewal
19	M/s Chowgule & Co Pvt Ltd, Costi Mine, Sanguem	Iron ore	Water Consent Renewal
20	M/s Hotel Fidalgo, Panaji	Hotel	Hazardous Waste Authorisation
21	M/s Rukmini Pack Print Pvt Ltd, Pilerne Indl Estate	Printing	Hazardous Waste Authorisation

Table 1-u

The following applications were approved in pursuance of the recommendations made at the 49th meeting of the Re-constituted Technical Committee held on 20/09/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Nivco Logistics, Rumbrem, Sanguem	Stacking of minerals	NOC
2	M/s Shivam Developers, Calangute	Hotel	Water & Air Consent New
3	M/s Syngenta India Limited, Corlim	Actara 75 SG (Platinum)	Water Consent New(Actara 75SG)
4	M/s Syngenta India Limited, Corlim	Operation of DG set	Air Consent New (for DG set)
5	M/s Kamat Cashew Products, Bicholim	Cashew kernels	Water Consent New
6	M/s Kamat Enterprises, Valpoi	Cashew kernels	Water Consent New
7	M/s Kamat Cashew Industries, Valpoi	Cashew kernels	Water Consent New
8	M/s Goan Real Estate & Construction Pvt. Ltd, Phase II, Aldeia de Goa, Phase I, Bambolim	Residential complex	Water Consent New
9	M/s Hotel La Grace, Margao	Hotel	Water Consent New
10	M/s Surya Sangolda Management Company, Sangolda	Hotel	Water & Air Consent New

11	M/s Costa Pinto & Associates, Sancoale	Laundry	Air Consent New & Water Consent Renewal
12	M/s Meha Chemicals, Kundaim Indl Estate	Aluminium hydroxide & other chemical products	Air Consent New & Water Consent Renewal
13	M/s S.N. Industries, Tivim Indl Estate	All types of moulded aluminium items	Water & Air Consent Renewal
14	Smt. Kunda R. Gharse, Cazreachem Culna Cudenem Mine	Iron ore	Air Consent Renewal
15	M/s Noor Mohammed Abdul Karim, Oiteiro Divodgal Curdi Mine, Sanguem	Iron ore	Water Consent Renewal
16	M/s Haidar Kassim Khan, Vangi Bindi Advona Mine, Quepem & Sanguem	Iron ore	Water Consent Renewal
17	M/s Damodar Mangalji & Co. Ltd, Ambeavalem Bharad Mine	Iron ore	Water Consent Renewal
18	M/s V.S. Dempo & Co Ltd, Beneficiation Plant at Surla	Iron ore run of mine	Water Consent Renewal
19	The Executive Engineer, Works Division XXI (PHE), Baina, Vasco	14 MLD Sewage Treatment Plant	Water Consent Renewal
20	M/s Majorda Beach Resort, Majorda	Hotel	Water & Air Consent Renewal
21	M/s Advani Hotels & Resorts (I) Ltd, Ramada Caravela Beach Resort, Varca	Hotel	Air Consent Renewal
22	M/s Encube Ethicals Pvt. Ltd, Madkai Indl Estate	Ointments, creams, lotions, gels	Air Consent Renewal
23	M/s Ranbaxy Laboratories Ltd, Madkaim Indl Estate	Tablets, capsules, ointment tubes	Water Consent Renewal
24	M/s FDC Limited, Unit I & II, Verna Indl Estate	Tablets, capsules & ORS	Water & Air Consent Renewal
25	M/s Goa Invescast Ltd., Kundaim Indl Estate	Precision casting	Water & Air Consent Renewal
26	M/s Rukminirama Steel Rollings Pvt Ltd, Melting Division, L-17, Cuncolim Indl Estate	MS ingots, runner/ riser	Water Consent Renewal
27	M/s S.N. Industries, Tivim Indl Estate	All types of moulded aluminium items	Hazardous Waste Authorisation
28	M/s Costa Pinto & Associates, Sancoale	Laundry	Hazardous Waste Authorisation
29	M/s Advani Hotels & Resorts (I) Ltd, Ramada Caravela Beach Resort, Varca	Hotel	Hazardous Waste Authorisation
30	M/s Meha Chemicals, Kundaim Indl Estate	Aluminium hydroxide & other chemical products	Hazardous Waste Authorisation

Table 1-v

The following applications were approved in pursuance of the recommendations made at the 50th meeting of the Re-constituted Technical Committee held on 27/09/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Spazio Leisure Resort, Anjuna	Hotel	Water & Air Consent New
2	M/s Priyadarshinin River Cruises, Princess de Goa, Panaji	Cruise vessel	Water & Air Consent New
3	M/s Jessica Le Saffron Resort, Candolim	Hotel	Water & Air Consent New
4	M/s Finolex Cables Ltd, OFC Division, Verna Indl Estate	Optic fibre cable, insulated wires & cables, fiber reinforced plastic rod	Air Consent New & Water Consent Renewal
5	M/s Quality Foods, Cuncolim Indl Estate	Fish processing	Water Consent Renewal
6	M/s Hindustan Petroleum Corpn Ltd, Kundaim Indl Estate	LPG bottling	Water Consent Renewal
7	M/s Guala Closures (India) Pvt Ltd, Bicholim	Non refillable plastic closures, pet performs, nip caps	Water Consent Renewal
8	M/s Siemens Ltd, Verna Indl Estate	Medical diagnostic xray equipment	Water & Air Consent Renewal
9	M/s Hotel Leela Venture Ltd, Cavelossim	Hotel	Water Consent Renewal
10	M/s Goenca Resorts Pvt Ltd, Resorte Marinha Dourado, Arpora	Hotel	Water Consent Renewal
11	M/s Sociedade Timblo Irmaos Limitada Copila Gaichem Paul Iron ore Mine, Sanguem	Iron ore	Air Consent Renewal
12	M/s United Spirits Ltd, Ponda	IMFL & malt spirit	Water Consent Renewal
13	M/s Priyadarshinin River Cruises, Princess de Goa, Panaji	Cruise vessel	Hazardous Waste Authorisation
14	M/s Quality Foods, Cuncolim Indl Estate	Fish processing	Hazardous Waste Authorisation

Table 1-w

The following applications were approved in pursuance of the recommendations made at the 51st meeting of the Re-constituted Technical Committee held on 04/10/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	The Department of Tourism, Panaji	Expansion of Panaji Jetty	NOC
2	M/s Sai Point Cars Pvt Ltd, Camurlim	Sales and service of cars	Water & Air Consent New
3	M/s Hotel Vasco, Vasco da Gama	Hotel	Water & Air Consent New
4	M/s Shri Bhavani Minerals, Beneficiation and Magnetic Separation Plant, Pale	Iron ore concentrates	Water & Air Consent Renewal
5	M/s D. B. Bandodkar & Sons Pvt	Iron ore	Water & Air Consent

	Ltd, Matta e Dando Iron ore Mine, Velguem		Renewal
6	M/s R. R. Painguinkar, Chiraband e Vall Iron ore Mine, Sanguem	Iron ore	Water Consent Renewal
7	M/s Manuel da Costa, Sem Denominacao Especial Iron ore Mine, Sanguem	Iron ore	Water Consent Renewal
8	M/s Raghuvir Sinai Gharse, Carcareatemb Bombod Iron ore Mine, Sanguem	Iron ore	Water Consent Renewal
9	M/s Sociedade Timblo Irmaos Limitada, Dignem Iron Ore Mine, Bicholim	Iron ore	Water Consent Renewal
10	M/s Sai Point Cars Pvt Ltd, Camurlim	Sales and service of cars	Hazardous Waste Authorisation

Table 1-x

The following applications were approved in pursuance of the recommendations made at the 52nd meeting of the Re-constituted Technical Committee held on 11/10/10

Sr. No.	Name of the unit & location		Application cleared for
1	M/s Syngenta India Limited, Corlim	Axial 5 EC	NOC
2	M/s Maruti Agro Products, Madkaim	Fruit juice	Water & Air Consent New
3	M/s Chowgule & Co Pvt Ltd, Plot for stacking, Pale Mine	Stocking of ROM & iron ore	Water & Air Consent New
4	M/s Sea View Resorts, Canacona	Hotel	Water & Air Consent New
5	M/s Sungrace Marketing Enterprises Pvt Ltd, Hotel Sun Inn, Ponda	Hotel	Water & Air Consent New
6	M/s Tata Consultancy Services Ltd, Tivim Indl Estate	Operation of STP	Water Consent New (STP)
7	M/s Goa Auto Rajee Auto Pvt. Ltd., Ponda	Servicing of two wheelers	Air Consent New & Water Consent Renewal
8	M/s Essel Propack, Kundaim Indl Estate	Multilayered laminated collapsible tubes	Water & Air Consent Renewal
9	M/s Hotel Leela Venture Ltd, Cavelossim	Hotel	Air Consent Renewal
10	M/s Golden Peace Hotels and Resorts Pvt. Ltd. (Neo Majestic), Porvorim	Hotel	Water & Air Consent Renewal
11	M/s Kunda Gharse, Tollem Group of Mines, Tudou and Patiem	Iron ore	Water Consent Renewal
12	M/s M. S. Talaulikar, Saniem Iron Ore Mine, Sacorda	Iron ore	Water Consent Renewal

13	M/s Guala Closures (India) Pvt. Ltd., Sanquelim	Pet performs, temper evident plaster closures and nip caps	Air Consent Renewal
14	M/s S. Chems & Allied Producers Pvt Ltd, Cuncolim Indl Estate	Welding flux, manganese powder, welding wire	Air Consent Renewal
15	M/s Sesa Goa Ltd., Sanquelim Iron ore mine	Iron ore	Water Consent Renewal
16	M/s Goa Mineral Processor, Kakoda Industrial Estate	Manganese powder	Air Consent Renewal
17	M/s Kilito Engineering Works, Rassaim, Loutolim	Repairs of vessels	Air Consent Renewal
18	M/s Maruti Agro Products, Madkaim	Fruit juice	Hazardous Waste Authorisation
19	M/s Syngenta India Limited, Corlim	Pesticides	Hazardous Waste Authorisation
20	M/s Guala Closures (India) Pvt. Ltd., Sanquelim	Pet performs, temper evident plaster closures and nip caps	Hazardous Waste Authorisation
21	M/s Goa Auto Rajee Auto Pvt. Ltd.,Ponda	Servicing of two wheelers	Hazardous Waste Authorisation

Table 1-y

The following applications were approved in pursuance of the recommendations made at the 53rd meeting of the Re-constituted Technical Committee held on 18/10/10

Sr. No.	Name of the unit & location	Products	Application cleared for
1	M/s Fortune Distillers & Vintners Pvt Ltd, Cuncolim Indl Estate	IMFL	NOC
2	M/s Essel Propack Limited, Kundaim Industrial Estate	Plastic printed web	NOC (expansion)
3	M/s Convention Hotels India Pvt Ltd, Calangute	Hotel	NOC
4	Shri Sony Rodrigues, Loutolim	Laterite quarry	NOC
5	M/s Marine Electricals (I) Pvt Ltd, S-17/18, Verna Indl Estate	Control panels	Water & Air Consent New
6	M/s Alcon Cement Company Pvt Ltd, Bicholim	Portland slag cement, ground granulated blast furnace slag	Air Consent Renewal
7	M/s Golden Products (Goa), Ponda	Cashewnut shell liquid oil	Water & Air Consent Renewal
8	M/s Santiago Resorts, Calangute	Hotel	Water Consent Renewal
9	M/s Greater Ferromet (100% EOU), Beneficiation Plant, Santona, Sanguem	Iron ore concentrates	Air Consent Renewal
10	M/s Chowgule & Co. Pvt. Ltd, Onda Mine	Iron ore	Water Consent Renewal
11	M/s V.D. Chowgule, Costi Mine	Iron ore	Water Consent Renewal
12	Shri. Hiralal Kodidas, Gogoro	Iron ore	Water Consent

	Ou Gulcan Dongor Mine, Sanguem		Renewal
13	M/s G.N. Agrawal, Borchí Mordí Mine, Quepem	Iron ore	Water Consent Renewal
14	M/s Lithoferro, Calsanichomato de Oilomol Mine, Bicholim	Iron ore	Water Consent Renewal
15	M/s V.M. Salgaocar & Bro Pvt. Ltd, Ore loading facility at Vagus, Bicholim	Barge loading facility	Air Consent Renewal
16	Smt. Kunda R. Gharse, Cazreachem Culna Cudnem Mine	Iron ore	Water Consent Renewal
17	M/s Sesa Goa Limited, Metcoke Division, Bicholim	Metallurgical coke, 4 loading & unloading jetties and stamp charging plant	Water & Air Consent Renewal
18	M/s Abbott India Ltd, Verna Indl Estate	Pharmaceutical formulation	Hazardous Waste Authorisation

Table 1-z

The following applications were approved in pursuance of the recommendations made at the 54th meeting of the Re-constituted Technical Committee held on 25/10/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Aresal Industries, Sirsaim	Basalt (Quarry)	NOC
2	M/s Reira Eco Ventures, Sao Mathias – Divar	Prawn culture	NOC
3	M/s Satyen Enterprises, Verna Indl Estate	Aluminum fabrication & grills, gates & shutters	NOC
4	M/s Pereira Fabrication, Goa Velha	Fabrication of grills, gates & railings	NOC
5	M/s Sociedade de Fomento Industrial Pvt Ltd, Sanguem	Mobile Barge Loading Facility (telestacker)	NOC
6	M/s Mallikarjun Agro Foods, Canacona	Snack foods	Water & Air Consent New
7	M/s Phoenix Alcobevez, Ucassaim	Blending and bottling of IMFL & wine	Air Consent New
8	M/s Shell Top Inn, St. Cruz	Hotel	Water & Air Consent New
9	M/s Amba Industries, Madkai Indl Estate	Plastic household items	Water Consent Renewal
10	M/s Kundil Rolling Mills Pvt Ltd, Kundaim Industrial Estate	MS rolled products	Water & Air Consent Renewal
11	M/s Kundil Alloys Pvt Ltd, Kundaim Industrial Estate	MS Ingots	Air Consent Renewal
12	M/s United Breweries Ltd, Bethora	Beer	Water Consent Renewal
13	M/s V. S. Dempo & Co Ltd, Surla Mine Beneficiation Plant, Bicholim	Iron ore fines	Water & Air Consent Renewal
14	M/s V. S. Dempo & Co Ltd, Curpem Mine, Sanguem	Iron ore	Water Consent Renewal

Table 1-aa

The following applications were approved in pursuance of the recommendations made at the 55th meeting of the Re-constituted Technical Committee held on 01/11/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Anjali Engineering Works, Kundaim Indl Estate	M.S. fabrication i.e. grills & gates	NOC
2	M/s Glenmark Generics Ltd, S-7, Colvale Indl Estate	Tablets	NOC (expansion)
3	M/s Priority Automobiles Pvt Ltd, Verna Indl Estate	Sales and service of vehicles	NOC
4	M/s Silva Real Estates & Developers Pvt. Ltd., Villagio Inn, Betalbatim	Hotel	NOC
5	M/s Shakti Polymetals Mfg. Pvt. Ltd., Madkai Indl Estate	Polybags, plastic granules, polythene films & other poly metals	Water & Air Consent New
6	M/s Agave Industries India Pvt Ltd, Margao Indl Estate	Edible essential oils & sugar	Water & Air Consent New
7	M/s Sabri Enterprises, Kundaim Indl Estate	M.S. fabrication i.e. grills & gates	Water & Air Consent New
8	M/s Asra, Colvale Indl Estate	Cement blocks & readymix concrete	Air Consent New
9	M/s Crompton Greaves Ltd, Colvale Indl Estate	Electric motor	Water & Air Consent Renewal
10	M/s Sika India Pvt Ltd, Verna Indl Estate	Construction additives	Water & Air Consent Renewal
11	M/s Aquarius Fibreglass Pvt. Ltd., Diwar	FRP boats & FRP allied products & steel boats & vessels	Water & Air Consent Renewal
12	M/s Baddruddin Hussainbhai Mavani, Nomoxitembo de Caurem Mine	Iron ore	Water Consent Renewal
13	Smt. Berta de Rego e Fernandes, Mortegal Mordi Mine, Sanguem	Iron ore	Water Consent Renewal
14	M/s Timblo Pvt Ltd, Capxem Jetty, Ponda	Barge loading facility	Air Consent Renewal
15	M/s Kundil Alloys Pvt Ltd, Kundaim Industrial Estate	MS ingots	Water Consent Renewal
16	M/s Shakti Polymetals Mfg. Pvt. Ltd., Madkai Indl Estate	Polybags, plastic granules, polythene films & other poly metals	Hazardous Waste Authorisation

Table 1-ab

The following applications were approved in pursuance of the recommendations made at the 56th meeting of the Re-constituted Technical Committee held on 10/11/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Sonish Equi-Chem Industries,	M.S. & SS fabricated	NOC

	Madkaim Indl Estate	items like tanks, vessel	
2	M/s Unichem Laboratories Ltd, Pilerne Indl Estate	Increase in production of tablets	NOC (expansion)
3	M/s Cipla Ltd, plot no. 147/4, Verna Indl Estate	Biochemical pharmaceuticals formulation	NOC (expansion)
4	M/s Abalone Resorts Pvt Ltd, Arpora	Hotel	Water & Air Consent New
5	M/s Medcroft Hotels India Pvt Ltd, Hotel Oceanic, Canacona	Hotel	Water & Air Consent New
6	M/s Alcon Resort Holdings Ltd, Devaaya Ayurveda & Nature Cure Centre, Diwar	Hotel	Water & Air Consent New
7	M/s Kudnem Mineral Processing Co. Pvt. Ltd., Bicholim	Plot for stacking of ore	Water & Air Consent New
8	M/s Sai Shakti, Verna Indl Estate	Corrugated boxes & fabrication of shipbuilding items	Air Consent New & Water Consent Renewal
9	M/s G.N. Agrawal, Bimbol Mine, Collem	Iron ore	Water Consent Renewal
10	M/s Goa Glass Fibre Ltd, Colvale	Chopped strand mat, rovings, woven rovings, chopped strand	Water Consent Renewal
11	M/s Impala Distilleries, Quepem	IMFL, beer & wine	Hazardous Waste Authorisation
12	M/s Agam Batteries Pvt Ltd, Sancoale Indl Estate	Batteries & battery plates	Hazardous Waste Authorisation
13	M/s Goa Glass Fibre Ltd, Colvale	Chopped strand mat, rovings, woven rovings, chopped strand	Bio-Medical Waste Authorisation

Table 1-ac

The following applications were approved in pursuance of the recommendations made at the 57th meeting of the Re-constituted Technical Committee held on 15/11/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Tulip Diagnostics (P) Ltd, Verna Indl Estate	Diagnostic reagents & kits (cultures of micro organisms)	Water Consent New (expansion)
2	M/s Berger Becker Coatings Pvt Ltd, Pilerne Indl Estate	Operation of ETP	Water Consent New (operation of ETP)
3	M/s Syngenta India Limited, Corlim	R & T Lab (extension)	Water Consent New (R & T Lab extension)
4	M/s Syngenta India Limited, Corlim	Desalination plant (Reverse Osmosis)	Water Consent New (Desalination plant)
5	M/s Paradise Ventures, Paradise-I, Panaji	Cruise vessel	Water Consent New
6	M/s Goan Hotels & Clubs Pvt Ltd, Hotel Grand Hyatt Goa, Bambolim	Hotel	Water & Air Consent New
7	M/s Hammond Resort, Varca	Hotel	Water & Air Consent

			New
8	M/s Doddanavar Brothers, Suctalim, Sanguem	Plot for stacking of ore	Water & Air Consent New
9	M/s Crompton Greaves Ltd, Kundaim Indl Estate	FHP motors	Water Consent Renewal
10	M/s Sangameshwar Marine Services, Issorcim, Dabolim	collection of sewage from the casino vessel anchored in river Mandovi	Permission for collection of sewage from the casino vessel anchored in river Mandovi
11	M/s Paradise Ventures, Paradise-I, Panaji	Cruise vessel	Hazardous Waste Authorisation
12	M/s Goan Hotels & Clubs Pvt Ltd, Hotel Grand Hyatt Goa, Bambolim	Hotel	Hazardous Waste Authorisation

Table 1-ad

The following applications were approved in pursuance of the recommendations made at the 58th meeting of the Re-constituted Technical Committee held on 22/11/10

Sr. No.	Name of the unit & location	Product	Application cleared for
1	M/s Goa Shipyard Limited, Vaddem, Vasco	Shipbuilding & ship repairs	NOC (expansion)
2	M/s Nestle India Ltd, Usgao Indl Estate	Increase in production	NOC (expansion)
3	M/s Nestle India Ltd, Usgao Indl Estate	Increase in production of wafer	Water & Air Consent New (expansion)
4	M/s Gemini Distilleries (Goa) Pvt Ltd, Sancoale Indl Estate	Low strength alcoholic beverages & IMFL	Air Consent New
5	M/s Silver Sands, Hideway Hotel, Candolim	Hotel	Water & Air Consent New
6	M/s Emco Goa Pvt Ltd, Bimbol Mine	Iron ore	Water Consent Renewal
7	M/s Salgaonkar Mining Industries Pvt. Ltd. (Tolem De Quela – Keli Iron Ore Mines)	Iron ore	Water Consent Renewal
8	M/s V. S. Dempo & Co Ltd, Surla Mine Beneficiation Plant, Bicholim	Iron ore fines	Air Consent Renewal
9	M/s Timblo Minerals Pvt Ltd. Tollem Beneficiation Plant, Sanguem	Iron ore fines	Air Consent Renewal
10	M/s Timblo Minerals Pvt Ltd. Magnetic Separation Plant at Tollem Mines, Sanguem	Iron ore fines	Air Consent Renewal
11	M/s Silver Sands, Hideway Hotel, Candolim	Hotel	Hazardous Waste Authorisation

Table 1-ae

The following applications were approved in pursuance of the recommendations made at the 59th meeting of the Re-constituted Technical Committee held on 29/11/10

Sr.	Name of the unit & location	Product	Application cleared
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No.			for
1	M/s Neelkanth Steel Furniture, Madkai Indl Estate	MS steel furniture & powder coating	NOC
2	M/s Vishwa Saraswati Society, Hotel Management Institute, Raia	Hotel management institute	NOC
3	M/s Gera Developers Pvt. Ltd, Caranzalem	Residential complex	NOC
4	M/s Procter & Gamble Hygiene & Health Care Ltd, Kundaim Indl Estate	Whisper sanitary pads	Air Consent New (addl DG set)
5	M/s Goa Rajee Auto Pvt. Ltd, Vasco	Servicing of two wheelers	Air Consent New
6	M/s Ramcons Resorts India Pvt Ltd, The Fern Gardenia Resort, Canacona	Hotel	Water & Air Consent New
7	M/s Leela Distilleries Pvt Ltd, Madkai Indl Estate	Bottling of IMFL	Air Consent New & Water Consent Renewal
8	M/s Goa Rajee Auto Pvt. Ltd, Navelim, Margao	Servicing of two wheelers	Air Consent New & Water Consent Renewal
9	M/s Taj Sats Air Catering Ltd, Dabolim, Vasco	Supply of Cooked food to aircrafts	Air Consent New & Water Consent Renewal
10	M/s Duraline India Pvt Ltd, Sancoale Indl Estate	High density polyethylene pipes & ducts	Water & Air Consent Renewal
11	M/s Hindustan Foods Ltd, Usgao, Ponda	Extruded cereal base	Water & Air Consent Renewal
12	M/s Standard Transformers, Canacona Indl Estate	Electrical transformers & electrical switch gear	Water Consent Renewal
13	M/s Goa Bottling Company Limited, Raia	Sweetened carbonated beverages, carbonated water & RTS beverage	Water & Air Consent Renewal
14	M/s Sonesta Inns Pvt Ltd, Candolim	Hotel	Water & Air Consent Renewal
15	M/s The Oceanique Resort, Unit of MEK Developers Ltd, Colva	Hotel	Water & Air Consent Renewal
16	M/s Intercontinental The Lalit Goa Resort, Canacona	Hotel	Air Consent Renewal
17	M/s Timblo Pvt Ltd, Maina Barge loading jetty, Bicholim	Barge loading facility	Water & Air Consent Renewal
18	M/s Sesa Goa Ltd, Amona Beneficiation Plant IA, Bicholim	Iron ore fines	Water & Air Consent Renewal
19	M/s Sesa Goa Ltd, Codli Beneficiation Plant, Dabal	Iron ore fines	Water & Air Consent Renewal
20	M/s Elray Minerals & Co. Aili Vagurbem Mine, Sanguem	Iron ore	Water Consent Renewal
21	M/s V.G. Quenim, Sonshi Mine, Sattari	Iron ore	Water Consent Renewal
22	M/s Hindustan Foods Ltd, Usgao, Ponda	Extruded cereal base	Hazardous Waste Authorisation

23	M/s Standard Transformers, Canacona Indl Estate	Electrical transformers & electrical switch gear	Hazardous Waste Authorisation
24	M/s Goa Bottling Company Limited, Raia	Sweetened carbonated beverages, carbonated water & RTS beverage	Hazardous Waste Authorisation
25	M/s Goa Rajee Auto Pvt. Ltd, Navelim, Margao	Servicing of two wheelers	Hazardous Waste Authorisation
26	M/s Sonesta Inns Pvt Ltd, Candolim	Hotel	Hazardous Waste Authorisation
27	M/s Intercontinental The Lalit Goa Resort, Canacona	Hotel	Hazardous Waste Authorisation
28	M/s The Oceanique Resort, Unit of MEK Developers Ltd, Colva	Hotel	Hazardous Waste Authorisation

Annexure II

LIST OF APPLICATIONS FOR CONSENTS TO ESTABLISH/OPERATE UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 AND AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 BIO-MEDICAL WASTE (MANAGEMENT & HANDLING) RULES, 1998 AND HAZARDOUS WASTE (MANAGEMENT & HANDLING) (AMENDMENT) RULES, 2000 PROCESSED AND APPROVED BY THE BOARD DURING THE YEAR 2010-11.

Table 2-a

The following applications (Green Files) were cleared by the approval of the Chairman during 27/04/2010 to 11/08/2010

Sr. No.	Name of the Project	Product	Nature of Application
1	M/s Velvin Paper Products, Kundaim Indl Estate	Corrugated boxes	NOC
2.	M/s Saloni Steel Furniture, Madkaim Indl Estate	Steel furniture	NOC
3	M/s Blue Flame Enterprises, Calangute	HP burner range, toaster & grill work	Water consent renewal
4.	Dr. Dhulapkar Hospital, Corlim	Hospital	Bio-Medical Waste authorisation
5.	M/s Shataku Ayurvedic & Naturcure Health Care Centre, Ponda	Healthcare centre	Bio-Medical Waste authorisation
6	Veterinary Dispensary, Mollem	Veterinary dispensary	Bio-Medical Waste authorisation
7.	Veterinary Dispensary, Dharbandora	Veterinary dispensary	Bio-Medical Waste authorisation
8	Smt. Sitabai Jairam Priolkar, Taleigao	Spray painting activity	Hazardous waste authorisation
9	M/s Scoop Industries Pvt Ltd, Corlim Indl Estate	Industrial & medical oxygen	Water consent renewal
10	M/s R.C. Metal Industries, Verna Indl Estate	Pre engineered building system components	NOC
11	M/s Zephyr Biomedicals, Verna Indl Estate	Diagnostic kits & reagents	Hazardous waste authorisation
12	M/s Siemens Ltd, Verna Indl Estate	Medical diagnostic equipments	Hazardous waste authorisation
13	Dr. Shirsat Hospital, Ponda	Hospital	Bio-Medical Waste authorisation
14	M/s Navtara Fabricators, Tivim Indl Estate	MS & SS fabrication	Water & Air consent new
15	M/s. Jeevanlakshmi Pacakging Solutions Pvt. Ltd., Sancoale Indl Estate	Aluminium tubes, foils, corrugated boxes, ROPP caps/ cans	Air consent new
16	M/s The Greenpeace Guesthouse, Candolim	Hotel	Water consent new
17	M/s A.K. Steel, Cuncolim Indl Estate	MS nails & MS washers	NOC

18	M/s Ultratech Bricks, Kundaim Indl Estate	Slag bricks, fly ash bricks, cement bricks	NOC
19	M/s Aditya Enterprises, Sancoale Indl Estate	Cement bricks & hollow blocks	NOC
20	M/s Vonco Plastics Pvt Ltd, Pissurlem Indl Estate	HDPP/ PP caps, pet performs	NOC
21	Institute of Psychiatry & Human Behaviour, Bambolim	Hospital	Bio-Medical Waste authorisation
22	M/s Rudra Electrical, Kundaim Indl Estate	Industrial motor rewinding	NOC
23	M/s Aquamarine Engineers, Colvale Indl Estate	Fabricated metal parts	Air consent new
24	M/s. R.S.S. Ice Plant & Storage (Unit-V), Cuncoim Indl Estate	Ice blocks	Water consent new
25	M/s Corporate Alliances, Verna Indl Estate	Construction of GRP & aluminium boats	NOC
26	M/s Pradeep Paver & Cement Products, Priol	Cement product such as pavers, blocks	NOC
27	M/s Shree Engineering Works, Bicholim Indl Estate	M.S. fabrication/ Aluminium fabrication	NOC
28	M/s Procter & Gamble Hygiene Health Care Ltd., Kundaim Indl Estate	Installation of DG set	NOC (for DG set)
29	M/s. St. Francisco Xavier Ice Plant, Old Goa	Ice blocks	Water & Air consent new
30	M/s. Simca Aluminium Pvt. Ltd., Margao Indl Estate	Aluminium fabrication	Water & Air consent new
31	M/s Sesa Goa Ltd, Shipbuilding division, Sirsaim	Repair pf barges	Hazardous waste authorisation
32	M/s Vassanji Industries, Plot No. 58, Bethora Industrial Estate	Steel furniture	Hazardous waste authorisation
33	M/s Raiyani Furnitures, Plot No. 69, Bethora Industrial Estate	Steel furniture	Hazardous waste authorisation
34	M/s P.R. Enterprises, Bicholim Indl Estate	Nuts & bolts	NOC
35	M/s. Safira Cooler, Sancoale Indl Estate	Chilled water	Water & Air Consent new

36	M/s Sagar Blocks, Bicholim	Cement blocks	NOC
37	M/s Nakoda Flour Mills Pvt. Ltd., Kundaim Indl Estate	Flour mill	NOC
38	M/s Shifa Beverages, Cuncolim Indl Estate	Packaged drinking water	NOC
39	M/s M.R. Engineering, Tivim Indl Estate	Boats, FRP allied products, steel boats & vessels	NOC
40	M/s Aquarius Fibreglas Pvt. Ltd., Tivim Indl Estate	FRP buoyant apparatus, FRP allied products, fibreglass boats	NOC
41	M/s ACE Diagnostic Centre, Mapusa	Clinic	Bio-Medical Waste authorisation
42	M/s Goa Invescast Ltd, Kundaim Indl Estate	Precision casting	Hazardous waste authorisation
43	M/s Star Formulations Pvt Ltd, Verna Indl Estate	Antiseptics & disinfectants	Hazardous waste authorisation
44	M/s Le Grand Engoneering Pvt Ltd, Tivim Indl Estate	C.I. Stators, C.I. endshield	Hazardous waste authorisation
45	M/s Petals Engineers Pvt. Ltd, Kundaim Indl Estate	Machinery spares for pharma unit	Hazardous waste authorisation
46	M/s Mahavir Trading Company, Verna Indl Estate	Screen printing (on paper, PVC, sheet/ films/ glass/ bottles etc.)	NOC
47	M/s Select Holiday Resorts Pvt. Ltd., Heritage Village Club, Arossim	Hotel	Hazardous waste authorisation
48	M/s St. Xavier Workshop, Bicholim	M.S. fabrication, M.S. grills & gates, rolling shutters	NOC
49	M/s Cipla Ltd., Plot No. L-139 to L-146, Verna Industrial Estate	Tablets, capsules	Hazardous waste authorisation
50	Veterinary Dispensary, Mandrem	Veterinary dispensary	Bio-Medical Waste authorisation
51	M/s Blue Cross Laboratories Ltd., Verna Indl Estate	Pharmaceutical unit	Hazardous waste authorisation
52	M/s Le Grand Engineering Pvt Ltd, Mapusa Indl Estate	C.I. Stators, C.I. endshield	Hazardous waste authorisation
53	M/s Geno Pharmaceuticals Ltd, Mapusa Indl Estate	Pharmaceutical unit	Hazardous waste authorisation

54	M/s. Standard Pack Prints Pvt. Ltd., Tivim Indl Estate	Corrugated boxes	Water & Air consent new
55	M/s. Palette Hotels (India) Pvt. Ltd. (Hotel 10 Calangute), Calangute	Hotel	Water & Air consent new
56	M/s Jayshri Windtech, Pilerne Indl Estate	Metallic & plastic windows with glass	NOC
57	Dr. G.S.N. Karmali Pathonal Lab, Vasco	Pathonal laboratory	Bio-Medical Waste authorisation
58	Dr. Ramesh Rayu Xet Verenkar, Cansaulim	Clinic	Bio-Medical Waste authorisation
59	Dr. Sanjeev Vaz Dental Clinic, Calangute	Clinic	Bio-Medical Waste authorisation
60	The Primary Health Centre, Balli Quepem	Health centre	Bio-Medical Waste authorisation
61	Dr. Jyoti M. Mallya Child Clinic, Ponda	Clinic	Bio-Medical Waste authorisation
62	Dr. Arun Volvoiker, Britona	Clinic	Bio-Medical Waste authorisation
63	Veterinary Dispensary, Pernem	Veterinary Dispensary	Bio-Medical Waste authorisation
64	M/s Green Company, Verna Indl Estate	Wax candles & crayons	NOC
65	M/s. Atul Udyog, Tivim Indl Estate	M.S. fabrication such as hand feed concrete mixer & bucket loader concrete mixer	Water & Air new
66	M/s Royal Aqua Global Pvt Ltd, Mapusa Indl Estate	Packaged drinking water	Water & Air consent new
67	M/s M.R. Engineering, Tivim Indl Estate	Boats, FRP allied products, steel boats & vessels	Water & Air consent new
68	Dr. Umesh Dhume, Bicholim	Clinic	Bio-Medical Waste authorisation
69	Pereira Clinic, Mapusa	Clinic	Bio-Medical Waste authorisation
70	Veterinary Dispensary, Netravali	Veterinary Dispensary	Bio-Medical Waste authorisation
71	Sri Mahalaxmi Steel Art, Bethora Indl Estate	Sheet metal components	Water & Air consent new

72	M/s Goldy Alupack, Kundaim Indl Estate	Aluminium foils	NOC
73	M/s Seahath Canning Company, Margao Indl Estate	Canning of fish	Hazardous waste authorisation
74	M/s Jeevanlakshmi Packaging Solutions Pvt. Ltd, Sancoale Indl Estate	Aluminium tubes & ROPP caps/ cans	Hazardous waste authorisation
75	M/s Crompton Greaves Ltd, Bethora Indl Estate	Ceiling fans	Hazardous waste authorisation
76	M/s United Breweries Limited, Bethora	Beer	Hazardous waste authorisation
77	M/s Machado & Sons Agents & Stevedores Pvt. Ltd, Cuncolim Indl Estate	Packaging of chocolates	NOC
78	M/s Javed Qureshi Exports	Meat processing & fish processing	Water & Air consent new
79	M/s Magic Smile Dental Clinic, Verem, Reis Magos	Clinic	Bio-Medical Waste authorisation
80	M/s Ranbaxy Pvt Ltd, Madkai Indl Estate	Tablets & capsules	Hazardous waste authorisation
81	M/s Horizon Resort, Calangute	Hotel	Hazardous waste authorisation
82	M/s VIC Industries, Pissurlem Indl Estate	Textile/ leather softeners	Hazardous waste authorisation
83	M/s Goa Art Enterprises, Canacona Indl Estate	Offset printing	Water & Air consent new
84	M/s Nav-Mahal Bearverges, Madkai, Ponda	Packaged drinking water	NOC
85	M/s Chowgule & Co Pvt Ltd, Kundaim Indl Estate	Godown for shipbuilding materials	Hazardous waste authorisation
86	M/s KGN Fabrication Workshop, Ponda	MS grills & gates	NOC
87	M/s. Cipla Ltd. Plot No. N-5a, Verna Industrial Estate,	Installation of a D.G. Set	NOC
88	M/s Glenmark Generics Ltd, Hormone Plant, Colvale Indl Estate	Tablets & capsules	Hazardous waste authorisation

89	M/s. Joanita Ice Plant Sancoale Industrial Estate,	Ice blocks	Water & Air new
90	M/s Shivram Industries, Sanguem	Cement blocks	NOC
91	M/s Saukar Freezers, Sancoale Indl Est	Ice blocks	Water consent renewal
92	M/s Lemon Tree Amarante Beach Resort, Candolim	Hotel	Hazardous waste authorisation
93	M/s R.K. engineering Works, Kakoda Indl Estate	Rolling shutters, trusses, truck metal body building	NOC
94	M/s Sai Deep, Pissurlem Indl Estate	Plastic crushed powder	NOC
95	M/s. ABM Enterprises, Kundaim Industrial Estate,	Bottling of twin oxide (ClO2)	Water & Air new
96	M/s Sanofi Synthelabo India Ltd, Verna Indl Estate	R & D on pharma product	Hazardous waste authorisation
97	M/s Tiger Sheet Metal Works, Corlim Indl Estate	Aluminium bodies, pipe frame bodies, container bodies	Hazardous waste authorisation
98	M/s Palolem Beach Resort, Canacona	Hotel	Hazardous waste authorisation
99	M/s Ace Diagnostic Centre, Mapusa	Clinic	Bio-Medical Waste authorisation
100	M/s Marpol Pvt. Ltd., Plot No. 12 to 18, Kakoda Industrial Estate	Powder coating, polyester resins & curing agents	Hazardous waste authorisation
101	M/s Polynova Industries Ltd., Plot No. 92-101, Kundaim Industrial Estate	Artificial leather	Hazardous waste authorisation
102	M/s Shashank Enterprises, Bicholim	Maintenance & repair of vehicles	NOC
103	M/s National Engineers, Kundaim Indl Estate	Stone crusher, rotary screen, crusher spares & conveyor system spare	NOC
104	M/s Rajesh Enterprises, Pissurlem Indl Estate	Packaging service	NOC
105	M/s Chowgule & Company Pvt. Ltd., Central Workshop, Khandepar	Workshop	Hazardous waste authorisation
106	M/s Marpol Pvt. Ltd., Plot No. ABC, Kakoda Industrial Estate	Powder coating	Hazardous waste authorisation

107	M/s Lupin Limited, Verna Industrial Estate	Tablets & capsules	Hazardous waste authorisation
108	M/s Oriyon Molding, Corlim Indl Estate	Plastic moulded items	Water consent renewal
109	M/s Alpha Impex Pvt Ltd, Pissurlem Indl Estate	Nylon filament	Water consent renewal
110	M/s. Vinayak Industries, Verna Indl Estate	Pet packing form for outlets & patchcord and moulded components for structural cabling products	Water & Air consent new
111	M/s Marpol Pvt. Ltd., Plot No. ABC, Kakoda Industrial Estate	Powder coating	Water & Air consent renewal
112	M/s Old Anchor (Unit of Dalmia Resorts), Cavelossim	Hotel	Hazardous waste authorisation
113	M/s Ashapura Manufacturing Co, Colvale Indl Estate	Bailing of scrap generated from pharma units	NOC
114	M/s Lupin Limited, Verna Indl Est	Pharma unit	NOC (for DG set)
115	M/s. Access Hospitality Management Pvt. Ltd. (Presa De Goa) Nagoa	Hotel	Water & Air consent new
116	M/s CMM Logistics Pvt. Ltd. CMM Arena, Mercedes	Warehousing & Commercial complex	Water & Air consent new and Hazardous Waste Authorisation
117	M/s Chowgule & Company Pvt. Ltd., Tudou Iron Ore Mine, Sanguem	Iron ore	Hazardous waste authorisation
118	M/s. Navketan Roller Flour Mills Pvt. Ltd., Bethora Indl Estate	Maida, sooji, bran & atta	Water & Air consent new
119	M/s. El-Dourado Holiday Homes, Anjuna	Hotel	Water & Air consent new
120	Dr. Irwin Barros, Betul	Clinic	Bio-Medical Waste authorisation
121	M/s Mahalaxmi Industries, Sancoale Indl Est	Cutting & polishing of natural stones	Water consent renewal
122	M/s Satpurush Industry, Tivim Indl Estate	Fabrication unit	Hazardous waste authorisation
123	Yashasvi Family Dentistry Clinic, Porvorim	Dental Clinic	Bio-Medical Waste authorisation
124	M/s D'mello Ice Factory, Cansa Tivim	Ice blocks	Water & Air consent new

125	M/s Shree Print & Pack, Verna Indl Estate	Printed board cartons, ampoule plastic tray	Water consent renewal
126	M/s Crompton Greaves Ltd, Colvale Indl Estate	Electric motor	Hazardous waste authorisation
127	M/s Eskay Packaging, Margao Indl Estate	Aluminium printed collapsible tubes	Hazardous waste authorisation
128	M/s Monak Packaging, Margao Indl Estate	Electric motor	Hazardous waste authorisation
129	M/s Raikar Hospital, Marcel	Hospital	Bio-Medical waste authorisation
130	M/s Sanjeevani Pathological Laboratory, Valpoi	Clinic	Bio-Medical waste authorisation
131	M/s Hindustan Coca Cola Beverages, Verna Indl Estate	Carbonated beverage & aerated water	Hazardous waste authorisation
132	M/s Adelphi Pharmaceuticals, Tivim Indl Estate	Glucogen in various flavours	Hazardous waste authorisation
133	M/s Quality Exports Ice Plant, Cuncolim Indl Estate	Ice blocks	NOC
134	M/s Axicon Corporation, Tivim Indl Estate	Profile gas cutting & machines	NOC
135	M/s Chowgule & Company Pvt Ltd, Sirigao Mine	Iron ore	Hazardous waste authorisation
136	M/s Omkar Industries, Kundaim Indl Estate	Plastic crushed powder	Water & Air consent new
137	M/s Unichem Laboratories, Pilerne Indl Estate	Tablets & capsules	Hazardous waste authorisation
138	M/s Yashodhan Hospital, Margao	Hospital	Bio-Medical waste authorization
139	M/s Arabin Bakery, Cuncolim	Bread & biscuit	Water & Air consent new
140	M/s Golden Peace Hotel & Resort Pvt Ltd, Porvorim	Hotel	Hazardous waste authorisation
141	Dr. Umesh Dhume, Assanora	Clinic	Bio-Medical waste authorisation
142	M/s Devaki Clinic, Valpoi	Clinic	Bio-Medical waste authorisation
143	M/s Marine Electricals, Verna Indl Estate	Control panel designing	NOC

144	M/s Raman Resort, Calangute	Hotel	NOC
145	M/s EasyCare Industries, Margao Indl Estate	Sheet metal components	Water & Air consent new
146	M/s. SES Engineering Works, Kundaim Indl Estate	Metal fabrication	Water & Air consent new
147	M/s Vinka Industries, Verna Indl Estate	Operation of D.G. set	Air consent new (for DG set)
148	M/s Prabhudessai Clinic, Porvorim	Clinic	Bio-Medical waste authorisation
149	M/s Su-Raj Diamonds & Jewellery Ltd, Tivim Indl Estate	Jewellery	Water consent renewal
150	M/s Child Clinic, Ponda	Clinic	Bio-Medical waste authorisation
151	M/s Western India Shipyard Ltd, Mormugao	Repair of ships	Hazardous waste authorisation
152	M/s Baba Hotels Pvt Ltd, Calangute Grande, Calangute	Hotel	Hazardous waste authorisation
153	M/s Caculo Motors Pvt Ltd, Verna Indl Estate	Servicing of 4 wheelers	Hazardous waste authorisation
154	M/s Aparant Iron & Steel Pvt. Ltd., Survey No. 46/3, Costi, Sanguem-Goa		Hazardous waste authorisation
155	M/s Castle Rock Packaging, Cuncolim Indl Estate	Printing of labels & monocartons	NOC
156	M/s Gomes Clinic, Mapusa	Clinic	Bio-Medical waste authorisation
157	Dr. Dipak Kamat, Margao	Clinic	Bio-Medical waste authorisation
158	Dr. Ashok Vishnu Vaze, Honda	Clinic	Bio-Medical waste authorisation
159	M/s Santoshi Packaging, Margao Indl Est	Corrugated boxes, partitions & screen printing	Water & Air consent new
160	M/s Sidereal Agencies, Mormugao	Collection & transportation of used oil/ waste oil/ oily sludge from Goa to Karnataka	Hazardous waste authorisation
161	M/s Hindustan Petroleum Corporation Ltd, Goa Aviation Service Facility, Murgaon Co- operative Indl Estate, Chicalim	Aviation fuel station	Water & Air consent renewal

162	M/s Pentair Water India Pvt Ltd, Verna Indl Estate	FRP tanks, codeline vessels	Hazardous waste authorisation
163	M/s Concip Ice Plant, Velim	Ice blocks	Water consent renewal
164	M/s Whispering Palms, Candolim	Hotel	Hazardous waste authorisation
165	M/s MSPL Gases, Margao Indl Estate	Oxygen gas	Water & Air consent renewal
166	M/s Cipla Ltd, Plot no. S-103 to S-105, S-107 & S-117, Verna Indl Estate	Operation of 1500 KVA DG set	Air consent new (for DG set)
167	M/s Cipla Ltd, Plot no. S-103 to S-116, Verna Indl Estate	Warehousing activity	Water & Air consent new
168	M/s Timblo Minerals Pvt Ltd, Tudou-Patiem, Sanguem	Iron ore mine	Hazardous waste authorisation
169	M/s Waigankar Engineering, Cuncolim Indl Estate	Grills, gates	NOC (renewal)
170	Dr. Anilkumar Pandurang Nayak, Marcel	Clinic	Bio-Medical waste authorisation
171	M/s MSPL Gases, Margao Indl Estate	Oxygen gas	Water & Air consent renewal
172	M/s Mahavir Plastic Industries, Corlim Indl Estate	Plastic moulded components	Water consent renewal
173	M/s A.M. Silva Ice Plant, Cuncolim Indl Estate	Ice blocks	NOC
174	M/s Jai Ganesh Ispat & Ferro Alloys Pvt Ltd, Corlim	Cold ribbed bars	NOC
174	M/s Hindustan Auto Components, Corlim Indl Estate	Brakes, gear boxes, light engineering, grill auto, silencer, steering gear control system	NOC
174	Shree Damodar Engineering, Kakoda Indl Estate	Repairs & maintenance of structural products	NOC

Table 2-b

The following applications (Green Files) were cleared by the approval of the Chairman during 11/08/2010 to 15/10/2010.

Sr. No.	Name of the Project	Product	Nature of Application
1.	M/s Kubera Paints, Ponda	Terpentine, thinner & ink	Water consent

		solvent	renewal
2.	M/s Jag Engineering, Sancoale Indl Estate	Bushes, propeller, shafts	NOC
3.	M/s Chowgule & Company Pvt. Ltd., Pale Iron Ore Mine	Iron ore	Hazardous waste authorisation
4.	M/s Ria Hospitality Pvt Ltd, Resort De Coracao, Calangute	Hotel	Hazardous waste authorisation
4.	M/s Tata Consultancy Services Ltd., Tivim Industrial Estate,	Automated Document Processing Systems (like Stacker, ENC, TPS, Base Plate Assembly, etc), Utility Bill Payment Systems (Self Service Terminals, Electro-Mechanical Assemblies	Air consent renewal
5.	M/s. Niranjani Industries Cuncolim Industrial Estate,	Ice blocks	Water & Air consent new
6	M/s. Shanti Enterprises Talaulim, Ponda-Goa	Wax candles	Water & Air consent new
7	M/s. Chowgule Industries Pvt. Ltd., Plot No. S-5A, Colvale Industrial Estate	Servicing of swaraj mazda vehicles	Hazardous waste authorisation
8	M/s Pereira Clinic, Mapusa	Clinic	Bio-medical waste authorisation
9	M/s. Goa Steel Fabricators, Marcela	Bus body building	Hazardous waste authorisation
10	M/s Bharat Petroleum Corporation Ltd., (LPG Bottling Plant), Verna Industrial Estate,	LPG bottling	Water consent renewal & Hazardous waste authorisation
11	M/s Sesa Industries Ltd, Pig Iron Plant, Amona,	Pig iron	Hazardous waste authorisation
12	M/s Sesa Goa Ltd, Metcoke Division, Sanquelim	Metallurgical coke	Hazardous waste authorisation
13	M/s Marmagao Steel Limited, Curtorim	Steel products	Hazardous waste authorisation
14	M/s. Goa Rajee Auto Pvt. Ltd., Navelim	Servicing of 2 wheelers	Hazardous waste authorisation
15	M/s Adesh Workshop, Dhargal	Maintenance & repair of motor vehicles	Water & Air consent new
16	M/s Dattatray Fabrication Work, Bicholim	Fabrication of grills & gates	NOC
17	M/s Mahalasa Technocoats, Kundaim Indl Estate	Powder coating	NOC

18	M/s Sai Industries, Kundaim Indl Estate	Plastic processed goods	NOC
19	M/s Diebold India Pvt Ltd, Tivim Indl Estate	Assembling of ATM machines	Air consent renewal
20	M/s Chikitsa Mother Care, Margao	Clinic	Bio-medical waste authorisation
21	M/s Indo Tech Ice & Cold Storage, Cuncolim Indl Est	Ice blocks	NOC
22	M/s Maheshwari Enterprises, Margao Indl estate	Corrugated boxes	NOC
23	M/s Mahalasa Cashew Processing Unit, valpoi	Cashew kernels	NOC
24	M/s Ramacanta Velingkar Minerals (100% E.O.U.), Shirval-Culna	Iron ore	Hazardous waste authorisation
25	M/s Romel Holdings Pvt. Ltd., Navi Mumbai, Maharashtra (recycler)	Collection & transportation of hazardous waste from Goa to Maharashtra	Hazardous waste authorisation
26	Smt. Hirabai M. Parsekar Memorial Hospital, Mandrem	Hospital	Bio-medical waste authorisation
27	M/s Samatma Estates Pvt. Ltd., Hotel Salida Del Sol, Panaji	Hotel	Hazardous waste authorisation
28	M/s Paradise Ventures, Paradise II, Panaji	Cruise	Hazardous waste authorisation
29	M/s. Plastic Export Zundert (I) Pvt. Ltd., Verna Indl Estate	Injection moulded plastic parts	Water & Air consent renewal
30	M/s. Multicavity Mouldings Pvt Ltd, Verna Indl Estate	Injection moulded plastic parts	Water consent renewal
31	M/ Phillipines, Chandor	Cashew fenny & coconut fenny	NOC
32	M/s Ayuron Implants Pvt. Ltd, Verna Indl Estate	Artificial parts of the body such as plates, screws etc.	Water & Air Consent New & Hazardous waste authorisation
33	M/s. Encube Ethicals Pvt. Ltd, Madkaim Indl Estate	Tablets, capsules	Hazardous waste authorisation
34	M/s Sunware Filaments Pvt Ltd, Kundaim Indl Estate	HDPE fishnet twine	Water & Air consent new
35	M/s Igloo Dairy Services Pvt. Ltd, Kundaim Indl Estate	Processed & pouch packed milk	Hazardous waste authorisation
36	M/s Aqua World, M.V. Coral Queen, Panaji	Cruise boat	Hazardous waste authorisation

37	M/s Fun Cream Foods (India) Ltd, Verna Indl Estate	Ice creams & other milk products	Hazardous waste authorisation
38	M/s Sika India Pvt Ltd, Verna Indl Estate	Concrete admixtures, epoxy adhesives & mortars, floor treatment & toppings	Hazardous waste authorisation
39	M/s Rajaram Bandekar (Sirigao) Mines Pvt. Ltd., Monte de Sirigao Mines	Iron ore	Hazardous waste authorisation
40	M/s Verna Enterprises Pvt Ltd, Verna Indl Estate	Machine tools & accessories	NOC
41	M/s Jolina Aqua, Curtorim	Packaged drinking water	NOC
42	M/s Shivam Developers, Calangute	Hotel	Hazardous waste authorisation
43	M/s Desai Concrete Casting, Sanguem	Concrete bricks	Water & Air consent renewal & Hazardous waste authorisation
44	M/s Vijai Marine Services, Rassaim	Ship repairs	Hazardous waste authorisation
45	M/s Indoco Remedies Ltd., Plot No. L-14, Verna Industrial Estate	Tablets, ointment, lotion	Hazardous waste authorisation
46	M/s Monak Packaging, Margao Indl Estate	Electric motor	Air Consent new
47	M/s Shalan Foods, Assonora	Biscuits, confectioneries, vermicilli	NOC
48	M/s Bharat Bakery, Pilerne Indl Estate	Bread, khari, toast	NOC
49	M/s Desai Packaging Pvt Ltd, Cuncolim Indl Estate	Corrugated board & boxes	NOC
50	M/s Krishna Enterprises, Margao Indl Estate	Aluminium fabrication	NOC
51	M/s Goodearth Waste Management Enterprises Pvt Ltd, Kakoda Indl Estate	Plastic chips, pipes & films	NOC
52	M/s Borkar Colorpacks Pvt Ltd, P-1/A, Margao Indl Estate	Printed corrugated cartons/ e flute cartons	NOC

Table 2-c

The following applications (Green Files) were cleared by the approval of the Chairman during 16/10/2010 – 10/12/2010.

Sr.	Name of the Project	Product	Nature of
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No.			Application
1	M/s Starflex Sealing India Pvt. Ltd, Verna Indl Estate	Gaskets	Hazardous waste authorisation
2	M/s E.B. Industries, Kakoda Indl Estate	Cement concrete hollow blocks	NOC
3	M/s Jeffrey Jeryl Distributors, Kundaim Industrial Estate	collection, reception & transportation of used oil from Goa to Kolhapur	Hazardous waste authorisation
4	M/s Bhagawati Structural Works Dabolim-Goa	MS & aluminium fabrication	Water & Air consent new
5	M/s. Bharat Met Pack Company, Kundaim Indl Estate	Metal tin containers (M.S.) & drums	Water & Air consent new
6	M/s Timblo Mining Infrastructure Ltd, Kakoda Indl Estate	Plastic chips, plastic films & pipes	NOC
7	M/s Oriental Engineering Works, Corlim Indl Estate	Ceramic articles	NOC
8	M/s Kamaxi Body Builders, Kakoda Indl Estate	Vehicle body building	NOC
9	M/s Umicore Anandeya India Pvt. Ltd., Sancoale Indl Est	Zinc oxide	Hazardous waste authorisation
10	M/s Zenith Computers Ltd, Sancoale Industrial Estate	Computers	Hazardous waste authorisation
11	M/s Dempo Mining Corporation Ltd, Bicholim Mine	Iron ore	Hazardous waste authorisation
12	Dr. Geeta Kudalkar, Vasco	Clinic	Bio-medical waste authorisation
13	M/s Bapu Packaging, Verna Indl Estate	Computer stationery, paper bags, envelopes	NOC
14	M/s Ashutosh Industries, Madkai Indl Estate	Solvents	Hazardous waste authorisation
15	M/s Estela Ice Bank, Corlim Indl Estate	Ice blocks	NOC
16	M/s Alcon Resort Holdings Ltd., Unit – Devaaya Ayurveda & Nature Cure Centre, Diwar	Hotel	Hazardous waste authorisation
17	M/s The Indian Hotels Company Limited, Unit: "Vivanta by Taj – Fort Aguada, Goa", Sinquerim	Hotel	Hazardous waste authorisation
18	M/s Vishal Foods, Sancoale Indl Estate	Biscuits, cookies, bread	NOC
19	M/s Ashwin Capacitors, Pilerne Indl Estate	Injection moulded plastic components	Water consent renewal
20	M/s Mandovi Metals Pvt. Ltd., Kundaim Indl Estate	MS ingots	Hazardous waste authorisation
21	M/s Automobile Corporation of Goa Ltd, Plant No. 1, Bus Body	Bus bodies	Hazardous waste authorisation

	Building, Honda		
22	M/s Kundaikar Dental Clinic, Corlim	Dental Clinic	Bio-medical waste authorisation
23	M/s Mohit Steel Industries Pvt. Ltd., Kundaim Indl Estate	MS ingots	Hazardous waste authorisation
24	M/s Baddrudin H. Mavani, Nomoxitembo de Caurem mine & Caurem Beneficiation Plant	Iron ore	Hazardous waste authorisation
25	M/s Chaya Flour Rice & Masala Mill, Shiroda	Flour, rice & masala mill	Water & Air consent new
26	M/s Joanita Ice Plant, Unit II, Sancoale Indl Estate	Ice blocks	NOC
27	M/s Sungrace Marketing Enterprises Pvt. Ltd., (Hotel Sun Inn), Ponda	Hotel	Hazardous waste authorisation
28	M/s Mandovi Casting Pvt. Ltd., Plot No. 341, Kundaim Industrial Estate	MS ingots	Hazardous waste authorisation
29	M/s Goa Carbonic Industries Pvt. Ltd., Zuarinagar	Carbon dioxide	Water & Air consent new & Hazardous waste authorisation
30	M/s Hyd-Air Engg Works Goa, Tivim Indl Estate	Hydraulic fittings	Water & Air consent new
31	M/s Vailankani-I Ice Plant, Shed D2-36, Sancoale Indl Estate	Ice blocks	NOC
32	M/s Cosme Remedies Ltd, Alto Betim	Pharmaceutical liquid formulation	Hazardous waste authorisation
33	M/s Sai Betul Fabrication, Khorlim	Fabrication of gates & windows	NOC
34	M/s V.S.Dempo & Co. Ltd, Surla-Sonshi mine	Iron ore	Hazardous waste authorisation
35	M/s Sandu Pharmaceuticals Ltd., Pilerne Industrial Estate	Tablets, ointments, oils, honey, churnas, syrup	Hazardous waste authorisation
36	M/s Nestle India Ltd, Usgao	Chocolates	Bio-medical waste authorisation
37	M/s Mouldit, Kundaim Indl Estate	Pet bottles	NOC
38	M/s Duraline India Pvt Ltd, Sancoale Indl Estate	High density polyethylene pipes & ducts	Hazardous waste authorisation
39	M/s Centaur Pharmaceuticals Pvt Ltd, Indl Estate	High density polyethylene pipes & ducts	Hazardous waste authorisation
40	M/s IPSHEM, ONGC, Betul, P.O. Velim	Training institute	Hazardous waste authorisation
41	M/s Eskay Packaging, Margao Indl Estate	Aluminium printed collapsible tubes	Hazardous waste authorisation
42	M/s Rivon Engineering Company, Margao Indl Estate	Diamond segments & diamond saw blades	Air consent new
43	M/s Niyoni Namkeens, Tivim Indl Estate	Edible products such as salted/ masala peanuts,	NOC

		grams	
44	M/s Ideal Engineers, Canacona Indl Estate	MS fabrication such as grills & gates	NOC
45	M/s The Indian Hotels Company Limited, Unit: "Vivanta by Taj – Holiday Village, Candolim	Hotel	Hazardous waste authorisation
46	M/s Goa Paints & Allied Products Pvt. Ltd., Kundaim Industrial Estate	Paints & thinners	Hazardous waste authorisation
47	Smt. Sitabai Jairam Priolkar, Taleigao	Spray painting activity	Water & Air consent new
48	M/s Sociedade Timblo Irmaos Limitada (Represented by Timblo Pvt. Ltd.), Dignem mine	Iron ore	Hazardous waste authorisation
49	M/s Amba Industries, Madkaim Indl Estate	Plastic reprocess granules & household items	Water & Air consent new
50	M/s. Ferns Engineering., Plot No. S-65 & S-65/B, Phase II- B, Verna Industrial Estate	Fabrication works	Water & Air consent new & HWA
51	M/s Kane Engineering, Margao Indl Estate	Maintenance & repair of machinery parts	NOC
52	M/s Physiomantra, Calangute	Clinic	Bio-Medical Authorisation
53	M/s Tulip Diagnostic Pct Ltd, plot no. 92/96, Verna Indl Estate	Diagnostic reagent & kits	Hazardous waste authorisation
54	M/s Hazardous Waste Management System, Panaji	Collection & transportation of hazardous waste (used oil) from Goa to Maharashtra	Hazardous waste authorisation
55	M/s Kineco Pvt. Ltd., Unit II, Plot no. 60, Pilerne Industrial Estate	FRP products	Hazardous waste authorisation
56	Shri. R.T. Deulkar, Carea Codil Upri Adam Tembo-E- Sauripar Iron Ore Mine	Iron ore	Hazardous waste authorisation
57	M/s Crompton Greaves Ltd. (Fan Division) Plot No. 214-A, Kundaim Industrial Estate,	Assembling of fans	Hazardous waste authorisation

Annexure III

Table 3-a1: MINARS DATA FOR THE MONTH OF APRIL 2010

Sr. No	Parameter	R. Chapora Nr Alorna Fort	R. Kalna At Chand el	R. Mapusa, Mapusa	R. Assanor a	R. Valvanti Sanqueli m	R. Madei Valpoi	R. Khand epar Opa	R. Khand eparC odli	R. Kusha vati Sangu em	R. Talpon a Canac on
1	Sulphate as SO ₄ (mg/l)	14.15	2.78	764.9	2.808	3.74	4.44	4.31	1.43	2.65	2.45
2	Total Dissolved Solids (mg/l)	102	113	162	104	912	48	1100	30	50	157
3	Total Suspended Solid (mg/l)	16	11	7	19	27	13	20	21	17	33
4	Fluoride (mg/l)	4.45	1.25	1.64	1.08	1.081	1.15	1.10	1.28	1.13	1.11
5	Boron (mg/l)	0.22	0.02	1.03	0.002	0.02	BDL	0.02	0.02	0.03	0.03
6	Total Alkalinity (mg/l)	72.0	22.0	64.0	34.0	29.0	24.0	32.0	31.0	27.0	29.0
7	Phenolphthalein Alkalinity (mg/l)	0	0	0	0	0	0	0	0	0	0
8	Sodium (mg/l)	437.8	3.9	1518.0	03.4	4.6	4.7	5.0	3.2	4.0	9.0
9	Potassium (mg/l)	28.9	0.8	85.6	0.8	0.6	1.0	0.7	0.4	0.6	1.0
10	Ca as CaCO ₃ (mg/l)	40.08	4.008	50.50	16.03	10.42	15.23	14.63	13.63	14.43	4.81
11	Magnesium (mg/l)	63.65	10.20	1077	43.25	3.78	7.96	8.35	7.86	13.50	4.18
12	Iron (mg/l)	0.084	0.052	0.044	0.040	0.100	0.185	0.09	0.09	0.06	0.04
13	Chromium (mg/l)	0.015	0.092	0.031	0.087	0.014	0.111	0.038	0.033	0.042	0.047
14	Cadmium (mg/l)	0.025	0.054	0.026	0.051	0.021	0.021	0.058	0.032	0.026	0.029
15	Lead (mg/l)	0.007	0.117	0.171	0.184	0.201	0.201		0.214	0.078	0.129
16	Zinc (mg/l)	0.029	0.034	0.030	0.033	0.030	0.042	0.03	0.046	0.050	0.051
17	Nickel (mg/l)	0.062	0.333	0.112	0.267	0.34	0.09	0.34	0.013	0.11	0.50
18	Copper (mg/l)	0.012	0.043	ND	0.016	ND	ND	0.016	ND	ND	0.015
19	Chloride (mg/l)	2002.2	2052.5	5556	21	13	23	22	21	25	26
20	Hardness (mg/l)	302	46	494	194	194	48	48	46	70	22
21	Alpha BHC (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.613	BDL	BDL
22	Calcium(mg/l)	28.1	0.7	27.3	0.7	0.5	0.9	0.7	0.4	0.7	1.0
23	Hexachloro benzene (ppb)	BDL	BDL	BDL	BDL	0.401	0.208	0.508	0.351	BDL	BDL
24	Beta BHC (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
25	Gamma BHC (ppb)	BDL	BDL	BDL	2.589	BDL	BDL	BDL	BDL	BDL	BDL
26	Heptachlor (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
27	Aldrin (ppb)	BDL	BDL	BDL	1.155	1.128	BDL	BDL	BDL	BDL	BDL
28	Heptachlor endo-epoxide (ppb)	1.057	BDL	BDL	BDL	BDL	BDL	BDL	2.850	BDL	BDL
29	Alpha endosulphate (ppb)	BDL	BDL	BDL	BDL	3.781	BDL	BDL	BDL	BDL	BDL
30	414'DDE (ppb)	BDL	BDL	BDL	0.290	BDL	BDL	BDL	BDL	BDL	BDL
31	Edrin (ppb)	1.895	1.999	3.344	2.613	1.842	3.279	2.127	0.912	1.142	1.588
32	β-endosulphar (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2.345
33	414'DDD (ppb)	1.502	BDL	0.524	BDL	BDL	BDL	BDL	0.695	BDL	BDL
34	2,4'DDT (ppb)	BDL	BDL	BDL	BDL	0.681	BDL	1.738	1.165	BDL	BDL
35	414'DDT (ppb)	1.502	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	Parathion methyl (ppb)	BDL		BDL	BDL	BDL	BDL	40.866	BDL	BDL	BDL
36	Methoxychlor (ppb)	0.788	BDL	6.024	BDL	BDL	0.324	BDL	0.324	22.178	1.622
37	Chloropylos (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	31.818	BDL	38.636

Table3-a2: MINARS DATA FOR THE MONTH OF APRIL 2010

Sr. No	Parameter	R. Sal at Panzorconi	R. Sal at Mobor	R. Bicholim at Barazanagar	Mayem Lake	Cumaruja Canal	R. Zuari at Panchwadi	R. Zuari at Cortalim	Dando Mollo Creek	R. Mando vi at Panaji	R. Mandovi at Tonca Marcel
1	Sulphate as SO ₄ (mg/l)	6.16	3874.0	278.2	30.65	1042.6	980.2	4087.2	1461.1	467.0	2883.4
2	Total Dissolved Solids(mg/l)	158	62	979	612	918	97	1111	143	620	154
3	Total Suspended Solid (mg/l)	11	1.0	12	18	19	12	09	14	21	2.0
4	Fluoride(mg/l)	1.03	1.11	2.85	1.21	1.06	2.4	2.81	1.92	3.11	2.29
5	Boron(mg/l)	0.02	3.16	0.03	0.02	3.45	1.24	4.42	1.57	5.46	3.62
6	Total Alkalinity(mg/l)	59	84	64	41	87	82	97	167	92	91
7	Phenolphthalein Alkalinity(mg/l)	0	0	0	0	0	0	0	0	0	0
8	Sodium(mg/l)	5.5	73130	13.6	4.1	6468.0	2138.0	8136.0	2411.0	7862.0	5233.0
9	Potassium(mg/l)	0.8	380.5	1.9	0.4	330.5	11.6	418.1	137.3	362.8	239
10	Ca as CaCO ₃ (mg/l)	9.62	16.03	21.64	7.21	-	111.42	-	-	-	-
11	Magnesium(mg/l)	-	-	17.58	2.62	-	-	-	-	-	-
12	Iron(mg/l)	0.012	0.019	0.06	0.06	0.14	0.08	0.21	0.068	0.151	0.059
13	Chromium (mg/l)	0.038	0.067	0.056	0.050	0.050	0.067	0.074	0.074	0.075	0.074
14	Cadmium(mg/l)	0.032	0.038	0.030	0.029	0.030	0.020	0.032	0.029	0.032	0.029
15	Lead(mg/l)	0.380	0.149	0.325	0.314	0.093	0.114	0.370	0.133	0.143	0.139
16	Zinc(mg/l)	0.046	0.040	0.058	0.057	0.060	0.059	0.053	0.053	0.247	0.058
17	Nickel(mg/l)	0.13	0.11	0.16	0.14	0.14	0.15	0.15	0.15	0.15	0.13
18	Copper(mg/l)	0.019	0.004	0.027	0.027	0.031	0.032	0.034	0.032	0.032	0.039
19	Chloride(mg/l)	2102	3804	33	29	2753	2252	4404	2252	2403	2403
20	Hardness(mg/l)	-	-	94	18	110	-	-	-	-	-
21	Alpha BHC (ppb)	BDL	BDL	BDL	2.689	BDL	BDL	BDL	BDL	BDL	BDL
22	Calcium(mg/l)	0.7	269.0	1.9	0.4	348.2	13.9	451.9	30.7	394.5	258.2
23	Hexachloro benzene (ppb)	BDL	BDL	BDL	BDL	0.279	BDL	BDL	BDL	BDL	0.444
24	Beta BHC (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
25	Gamma BHC (ppb)	BDL	0.425	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
26	Heptachlor (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
27	Aldrin (ppb)	BDL	BDL	1.018	0.440	0.660	0.550	1.128	BDL	0.660	BDL
28	Heptachlor endoepoxide (ppb)	2.804	BDL	BDL	BDL	2.482	BDL	BDL	BDL	BDL	BDL
29	Alpha endosulphate (ppb)	BDL	0.456	BDL	BDL	3.064	BDL	BDL	BDL	BDL	BDL
30	414'DDE (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
31	Edrin (ppb)	2.052	2.089	2.230	2.037	1.760	2.283	1.772	2.383	1.756	2.441
32	β-endosulphar (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9.378
33	414'DDD (ppb)	BDL	0.759	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
34	2,4'DDT (ppb)	BDL	1.272	BDL	1.845	BDL	BDL	BDL	BDL	BDL	BDL
35	414'DDT (ppb)	BDL	BDL	BDL	1.018	1.094	0.585	0.356	0.153	0.509	0.585
37	Parathion methyl (ppb)	44.271	20.433	34.055	BDL	BDL	BDL	BDL	30.649	13.622	27.244
36	Methoxychlor (ppb)	BDL	BDL	BDL	BDL	0.788	1.668	BDL	BDL	1.390	BDL
37	Chloropylos (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Table 3-a3: MINARS DATA FOR THE MONTH OF APRIL 2010

Sr. No	Parameter	Salauli m Resor voir	Bore well of Zuari Indust ries	Bore well at Germa nia Distille ries	Bore well at Parle Export	Bore well at Kundaim Indls	Bore well at Faber Castel Corlim Indls	Bore well at Lafarge Aggregate	Agricu ltural Canal at Cunco lim u/s	Agricult ural Canal at Cuncoli m d/s
1	Sulphate as SO ₄ (mg/l)	-	-	-	-					
2	Total Dissolved Solids(mg/l)	208	141	-	-	221	461	102	131	108
3	Total Suspended Solid (mg/l)	1.0	2.0	-	-	18	13	16	19	21
4	Fluoride(mg/l)	2.78	1.12	-	-	1.22	1.16	1.10	1.05	1.31
5	Boron(mg/l)	0.05	0.02	-	-		0.12			
6	Total Alkalinity(mg/l)	24	27	-	-	39	41	48	27	23
7	Phenolphthalein Alkalinity(mg/l)	0	0	-	-	0	0	0	0	0
8	Sodium(mg/l)	5.2	-	-	-	5.9	3.2	5.8	3.8	3.2
9	Potassium(mg/l)	0.8	-	-	-	0	0	0	0.5	0.5
10	Ca as CaCO ₃ (mg/l)	16.03	16.03	-	-	21.64	15.23	20.04	22.44	8.82
11	Magnesium(mg/l)	2.42	26.72	-	-				21.76	6.12
12	Iron(mg/l)	0.088	0.021	-	-	0.023	0.120	0.147	0.037	0.043
13	Chromium(mg/l)	0.070	0.065	-	-	0.067	0.135	0.177	0.094	0.086
14	Cadmium(mg/l)	0.030	0.028	-	-	0.03	0.056	0.074	0.034	0.030
15	Lead(mg/l)	0.135	0.339	-	-	0.134	0.147	0.142	0.153	0.131
16	Zinc(mg/l)	0.040	0.051	-	-	0.045	0.036	0.031	54	0.045
17	Nickel(mg/l)	0.14	0.13	-	-	0.13	0.299	0.435	0.145	0.118
18	Copper(mg/l)	0.032	0.024	-	-	0.031	0.011	0.028	0.007	0.021
19	Chloride(mg/l)	71	34	-	-	24	25	18	42	45
20	Hardness(mg/l)	26	126	-	-	-	-	-	112	34
21	Alpha BHC (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
22	Calcium(mg/l)	0.8	-			5.9	0.3	1.3	0.5	2.2
23	Hexachloro benzene (ppb)	BDL	BDL	BDL	BDL	BDL	0.208	0.337	BDL	BDL
24	Beta BHC (ppb)	BDL	BDL	BDL	BDL	BDL	2.233	BDL	BDL	BDL
25	Gamma BHC (ppb)	BDL	BDL	BDL	BDL	1.436	BDL	BDL	BDL	BDL
26	Heptachlor (ppb)	BDL	4.403	BDL	BDL	BDL	BDL	BDL	BDL	8.117
27	Aldrin (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
28	Heptachlor endo-epoxide (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
29	Alpha endosulphate (ppb)	BDL	1.239	BDL	BDL	BDL	BDL	BDL	BDL	BDL
30	414'DDE (ppb)	BDL	0.060	0.326	BDL	BDL	BDL	BDL	BDL	0.495
31	Edrin (ppb)	1.796	2.906	1.423	1.921	1.876	3.872	2.880	BDL	4.722
32	β-endosulphar (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
33	414'DDD (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
34	2,4'DDT (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	1.290	BDL	BDL
35	414'DDT (ppb)	BDL	0.484	BDL	BDL	BDL	BDL	0.509	5.879	BDL
37	Parathion methyl (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
36	Methoxychlor (ppb)	BDL	BDL	0.741	BDL	2.780	BDL	4.449	66.589	BDL
37	Chloropylos (ppb)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Table 3-b: MINARS DATA FOR RIVER CHAPORA NEAR ALORNA FORT AT PERNEM

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	30°C	27°C	27°C	25°C	28°C	29°C	29°C	22°C	25°C	26°C	28 °C
2	pH	6.7	6.70	6.03	5.72	7.71	6.06	6.37	6.12	5.83	5.95	7.42
3	Conductivity µs/cm	18.22	1764.0	60.5	50.9	5230.0	0.177	6900.0	1846.0	12940.0	30000.0	9110.0
4	Nitrogen(Nitrate)mg/l	0.124	1.05	0.616	0.420	0.15	0.645	0.21	0.188	0.15	0.14	0.0095
5	Dissolved Oxygen mg/l	6.8ml	6.8	6.8	7.0	7.5	6.84	7.65	7.16	7.1	7.1	7.1
6	BOD mg/l	1.96ml	0.6	0.6	1.0	0.7	1.32	1.97	2.29	0.9	1.2	1.2
7	Fecal Coli form MPN /100 ml	11.0	11.0	4.0	4.0	7.0	12.0	14.0	4.0	4.0	11.0	4.0
8	Total Coli form MPN/100 ml	150.0	150.0	150.0	120.0	150.0	170.0	175.0	125.0	155.0	150.0	125.0
9	Nitrite Nitrogen mg/l	0.072	BDL	BDL	0.020	BDL	BDL	BDL	0.01	BDL	0.003	0.003

Table 3-c: MINARS DATA FOR RIVER MAPUSA

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	31°C	27 °C	27 °C	26 °C	28 °C	28 °C	30°C	22°C	24°C	26°C	30 °C
2	pH	6.5	6.02	6.01	5.43	7.38	6.01	6.11	6.74	6.27	6.12	5.50
3	Conductivity µs/cm	16.22 µs/cm	13.91 µs/cm	84.4 µs/cm	103.5 µs/cm	137.8 µs/m	0.564 µs/cm	78.0 µs/m	78.4 µs/cm	6.94 µs/m	10.97 µs/cm	13.94 µs/cm
4	Nitrogen(Nitrate)mg/l	0.212	0.21	1.431	0.509	0.18	0.637	BDL	0.071	0.423	0.207	0.139
5	Dissolved Oxygen mg/l	8.7	6.5	6.5	6.0	5.2	5.84	4.39	8.46	6.5	6.5	6.5
6	BOD mg/l	0.68	0.7	0.6	2.0	2.0	2.59	2.27	1.0	1.2	1.3	1.3
7	Fecal Coli form MPN /100 ml	Nil	20.0	11.0	7.0	4.0	14.0	11.0	9.0	12.0	14.0	11.0
8	Total Coli form MPN/100 ml	10.0	210.0	210.0	150.0	120.0	200.0	125.0	160.0	170.0	175.0	170.0
9	Nitrite Nitrogen mg/l	0.089	BDL	BDL	0.003	BDL	BDL	BDL	BDL	BDL	0.002	0.002

Table3-d: MINARS DATA FOR RIVER KHANDEPAR AT CODLI

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	32°C	32°C	27°C	27°C	26°C	27°C	25°C	27°C	26°C	29°C	31°C
2	pH	6.73	6.02	5.60	6.10	6.70	6.60	5.76	5.78	6.18	6.08	6.48
3	Conductivity µs/cm	98.6 µs/cm	97.5 µs/cm	52.3 µs/cm	43.4 µs/cm	70 µs/cm	0.160µ s/cm	0.153µ s/cm	61.6 µs/cm	80.3 µs/cm	86.3 µs/cm	91.6 µs/cm
4	Nitrogen(Nitrate)mg/l	1.286	0.67	0.76	0.14	0.211	1.418	0.36	0.119	BDL	0.81	1.361
5	Dissolved Oxygen mg/l	7.1	7.1	7.0	7.1	6.85	7.1	7.4	6.51	7.4	7.1	6.8
6	BOD mg/l	1.3	1.6	0.99	0.35	2.31	0.6	0.9	0.34	1.2	0.9	1.0
7	Fecal Coli form MPN /100 ml	15.0	11.0	3.0	4.0	7.0	4.0	7.0	11.0	Nil	Nil	12.0
8	Total Coli form MPN/100 ml	200.0	150.0	150.0	175.0	120.0	120.0	170.0	170.0	105.0	65.0	200.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	BDL	0.005	BDL	BDL	BDL	0.015	0.003	0.003

Table 3-e: MINARS DATA FOR RIVER KHUSHAVTI NEAR BUND AT KEVONA

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	32°C	30°C	26°C	28°C	27°C	28°C	25°C	26° C	26°C	28°C	28°C
2	pH	6.51	6.13	5.72	6.04	6.56	6.60	5.64	5.55	6.07	6.12	6.96
3	Conductivity µs/cm	171.6 µs/cm	185.2 µs/cm	61.2 µs/cm	49.8 µs/cm	42.3 µs/m	0.160 µs/cm	0.201 µs/cm	73.6 µs/cm	129.8µ s/cm	132. 8 µs/cm	160.1µ s/cm
4	Nitrogen(Nitrate)mg/l	1.444	1.34	1.54	0.16	0.357	0.548	0.515	0.238	0.388	0.235	BDL
5	Dissolved Oxygen mg/l	7.1	6.8	6.2	6.8	6.471	6.8	7.1	7.48	7.1	7.1	6.8
6	BOD mg/l	1.5	0.7	3.92	2.5	2.47	0.6	0.9	0.66	1.2	0.9	1.0
7	Fecal Coli form MPN /100 ml	11.0	28.0	3.0	Nil	12.0	14.0	Nil	Nil	5.0	11.0	Nil
8	Total Coli form MPN/100 ml	150.0	240.0	125.0	125.0	210.0	200.0	75.0	120.0	125.0	155.0	10.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	BDL	0.007	BDL	BDL	BDL	BDL	0.002	0.006

Table3-f: MINARS DATA FOR RIVER SAL AT PAZORCONI

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	32°C	31°C	29°C	28°C	29°C	30°C	26°C	29°C	26°C	26°C	29°C
2	pH	6.8	7.92	7.73	6.28	6.99	6.8	6.06	7.78	6.0	5.40	7.03
3	Conductivity µs/cm	28.0 µs/cm	243.3 µs/cm	83.3 µs/cm	73.0 µs/cm	64.2µs /m	0.263 µs/cm	56.8 µs/cm	77.8 µs/cm	95.8 µs/cm	123.8µ s/cm	91.9 µs/cm
4	Nitrogen(Nitrate)mg/l	0.231	0.28	0.323	0.563	1.19	0.32	0.221	0.143	0.029	0.56	1.277
5	Dissolved Oxygen mg/l	6.51	5.04	4.0	6.8	6.84	5.86	6.18	6.83	6.5	4.88	4.23
6	BOD mg/l	2.61	1.79	2.1	2.0	0.66	1.97	2.29	0.99	1.0	1.63	2.93
7	Fecal Coli form MPN /100 ml	11.0	28.0	7.0	11.0	4.0	14.0	12.0	11.0	9.0	15.0	Nil
8	Total Coli form MPN/100 ml	150.0	240.0	175.0	150.0	150.0	210.0	200.0	175.0	145.0	225.0	4.0
9	Nitrite Nitrogen mg/l	0.001	BDL	0.082	0.005	BDL	0.002	0.011	BDL	BDL	0.03	0.004

Table 3-g: MINARS DATA FOR RIVER SAL AT MOBOR

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	31°C	30°C	27°C	28°C	28°C	30°C	28°C	29.5C	27.5C	28°C	29°C
2	pH	7.0	6.85	6.31	6.79	6.77	7.8	6.80	6.87	6.26	7.32	6.64
3	Conductivity µs/cm	113 µs/cm	54.2 µs/cm	36.8 µs/cm	34.34µ s/cm	32.5 µs/cm	150.6µ s/m	0.257 µs/cm	49.6 µs/cm	42.7 µs/cm	53.6 µs/cm	53.7 µs/cm
4	Nitrogen(Nitrate)mg/l	0.415	0.05	0.823	1.210	0.943	0.09	0.351	0.881	0.039	0.03	0.628
5	Dissolved Oxygen mg/l	4.55	6.02	5.1	6.8	6.19	5.20	6.18	4.55	7.1	6.51	6.51
6	BOD mg/l	3.1	1.48	1.3	3.0	2.292	0.66	1.97	0.98	1.2	1.32	2.29
7	Fecal Coli form MPN /100 ml	Nil	11.0	3.0	9.0	4.0	7.0	4.0	14.0	4.0	11.0	Nil
8	Total Coli form MPN/100 ml	10.0	150.0	120.0	120.0	120.0	150.0	140.0	200.0	125.0	150.0	110.0
9	Nitrite Nitrogen mg/l	0.003	BDL	0.002	0.005	BDL	0.004	0.021	BDL	BDL	BDL	0.004

Table 3-h: MINARS DATA FOR RIVER BICHOLIM AT BAZAR NAGAR

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	30°C	28°C	29°C	27°C	29°C	29°C	28°C	28°C	26°C	29°C	29°C
2	pH	6.32	7.28	5.92	5.70	7.09	6.56	6.11	6.12	5.65	5.61	6.96
3	Conductivity µs/cm	378 µs/cm	162.6 µs/cm	73.0 µs/cm	70.7 µs/cm	85.8 µs/cm	0.220µ s/m	0.203 µs/cm	96.7 µs/cm	133.9µ s/cm	153.2µ s/cm	166.4µ s/cm
4	Nitrogen(Nitrate)mg/l	1.25	1.22	1.283	0.52	0.631	Nil	0.386	0.886	0.441	0.3	0.459
5	Dissolved Oxygen mg/l	6.1	7.1	6.5	8.79	6.8	Nil	6.5	6.5	7.1	7.16	6.51
6	BOD mg/l	1.3	1.9	0.9	0.99	1.0	Nil	1.0	1.3	1.2	2.62	0.99
7	Fecal Coli form MPN /100 ml	11.0	21.0	21.0	14.0	Nil	Nil	Nil	Nil	5.0	11.0	4.0
8	Total Coli form MPN/100 ml	150.0	210.0	240.0	250.0	105.0	125.0	120.0	115.0	155.0	175.0	160.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	0.01	BDL	Nil	BDL	BDL	BDL	BDL	0.002

Table 3-i: MINARS DATA FOR MAYEM-LAKE AT MAYEM BICHOLIM

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	30°C	30°C	28°C	27°C	30°C	28.5°C	28°C	27°C	26°C	28°C	31°C
2	pH	7.5	7.36	5.47	5.41	7.04	7.12	5.80	6.27	5.53	5.30	6.95
3	Conductivity µs/cm	54.5 µs/cm	52.6 µs/cm	37.2 µs/cm	33.5 µs/cm	35.9 µs/cm	83 µs/cm	0.13 µs/cm	38.6 µs/cm	53.1 µs/cm	86.5 µs/cm	55.1 µs/cm
4	Nitrogen(Nitrate)mg/l	0.89	1.36	0.998	0.07	0.507		0.964	0.66	0.183	0.02	0.139
5	Dissolved Oxygen mg/l	6.5	6.5	7.4	7.2	7.4		6.8	6.8	7.1	5.2	5.53
6	BOD mg/l	0.9	2.3	0.8	1.32	1.2		0.9	1.3	1.2	1.310	0.99
7	Fecal Coli form MPN /100 ml	14.0	7.0	190.0	11.0	7.0	NIL	NIL	4.0	9.0	14.0	4.0
8	Total Coli form MPN/100 ml	200.0	150.0	21.0	150.0	150.0	80.0	85.0	175.0	170.0	200.0	145.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	BDL	BDL		BDL	BDL	BDL	BDL	0.003

Table 3-j: MINARS DATA FOR CUMBARJUA CANAL AT CORLIM

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	30°C	30°C	29°C	29°C	29°C	29°C	29°C	28°C	26°C	26°C	29°C
2	pH	6.3	6.09	5.42	5.82	6.60	6.60	5.70	6.18	6.08	6.15	6.54
3	Conductivity µs/cm	60.4 µs/cm	37.8 µs/cm	11.326 µs/cm	30.04 µs/cm	40.32 µs/cm	33.33 µs/cm	2.105 µs/cm	16.03 µs/cm	34.4 µs/cm	40.1 µs/cm	41.7 µs/cm
4	Nitrogen(Nitrate)mg/l	0.18	1.36	0.637	0.13	1.047		0.123	0.211	0.26	0.03	0.304
5	Dissolved Oxygen mg/l	6.8	6.8	6.8	7.3	7.1		6.8	6.5	6.5	5.53	4.56
6	BOD mg/l	0.9	2.2	0.9	0.67	0.9		0.9	1.0	1.0	3.9	3.58
7	Fecal Coli form MPN /100 ml	NIL	14.0	210.0	4.0	4.0	4.0	4.0	5.0	4.0	7.0	NIL
8	Total Coli form MPN/100 ml	7.0	175.0	14.0	175.0	125.0	150.0	140.0	155.0	150.0	125.0	85.0

9	Nitrite Nitrogen mg/l	0.0158	BDL	BDL	BDL	BDL		BDL	BDL	0.0243	BDL	0.005
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Table3-k: MINARS DATA FOR CREEK AT DANDO MOLLO, VELSAO

Sr. No	Parameters	May-10	June-10	July-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	32°C	29.0°C	29°C	25°C	29°C	27°C	-	28°C	29°C	30°C	28°C
2	pH	7.68	6.12	5.42	5.74	7.31	6.83	-	6.22	6.8	6.15	7.16
3	Conductivity µs/cm	30	915	11.326	379.0	1980	4.87	-	6.62	28	13.26	14.52
		µs/cm	µs/cm	µs/cm	µs/cm	µs/cm	µs/cm		µs/cm	µs/cm	µs/cm	µs/cm
4	Nitrogen(Nitrate)mg/l	0.152	0.90	0.637	0.11	1.51	0.101	-	0.417	0.158	0.49	0.182
5	Dissolved Oxygen mg/l	6.96	7.4	6.8	6.00	6.83	6.82	-	6.8	6.5	6.8	5.8
6	BOD mg/l	1.97	1.5	0.9	2.00	1.32	2.94	-	1.2	1.0	1.6	1.2
7	Fecal Coli form MPN /100 ml	75.0		210.0	9.0	4.0		-	11.0	4.0	4.0	NIL
8	Total Coli form MPN/100 ml	460.0		14.0	190.0	150.0		-	175.0	150.0	150.0	4.0
9	Nitrite Nitrogen mg/l	0.032	BDL	BDL	0.056	0.01	BDL	-	BDL	0.0143	0.005	0.003

Table 3-l: MINARS DATA FOR RIVER KALNA AT CHANDEL

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	27°C	28°C	25°C
2	pH	6.04	6.12	5.75
3	Conductivity µs/cm	48.7	0.182	96.4
4	Nitrogen(Nitrate)mg/l	1.826	1.218	0.309
5	Dissolved Oxygen mg/l	6.8	6.84	6.8
6	BOD mg/l	0.9	0.99	0.6
7	Fecal Coli form MPN /100 ml	NIL	7.0	9.0
8	Total Coli form MPN/100 ml	120.0	165.0	165.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table3-m: MINARS DATA FOR RIVER ASSANORA

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	27°C	27°C	26°C
2	pH	5.50	6.2	5.75
3	Conductivity µs/cm	61.5	0.168	83.7
4	Nitrogen(Nitrate)mg/l	1.482	0.18	0.025
5	Dissolved Oxygen mg/l	6.8	7.48	6.5
6	BOD mg/l	0.9	1.64	0.62
7	Fecal Coli form MPN /100 ml	4.0	12.0	7.0
8	Total Coli form MPN/100 ml	175.0	170.0	145.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table 3-n: MINARS DATA FOR RIVER VALVANTI AT SANQUELIM

Sr. No	Parameters	July-10	Oct-10
1	Temperature °C	27°C	27°C
2	pH	5.71	6.47
3	Conductivity µs/cm	53.7	0.165
4	Nitrogen(Nitrate)mg/l	0.659	0.12
5	Dissolved Oxygen mg/l	7.1	7.16
6	BOD mg/l	1.3	1.0
7	Fecal Coli form MPN /100 ml	7.0	7.0
8	Total Coli form MPN/100 ml	7.0	155.0

9	Nitrite Nitrogen mg/l	BDL	BDL
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Table 3-o: MINARS DATA FOR RIVER MADEI AT VALPOI

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	27°C	26°C	27°C
2	pH	5.63	6.4	5.94
3	Conductivity µs/cm	63.7	0.199	110.1
4	Nitrogen(Nitrate)mg/l	0.659	0.05	0.059
5	Dissolved Oxygen mg/l	7.1	7.81	7.4
6	BOD mg/l	1.3	1.97	0.9
7	Fecal Coli form MPN /100 ml	7.0	4.0	5.0
8	Total Coli form MPN/100 ml	210.0	140.0	125.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table3-p: MINARS DATA FOR RIVER KHANDEPAR AT OPA

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	28°C	27°C	26°C
2	pH	6.14	6.57	6.12
3	Conductivity µs/cm	52.2	0.320	93.9
4	Nitrogen(Nitrate)mg/l	0.61	0.256	0.037
5	Dissolved Oxygen mg/l	8.78	6.8	7.4
6	BOD mg/l	0.99	0.9	1.2
7	Fecal Coli form MPN /100 ml	20.0	4.0	NIL
8	Total Coli form MPN/100 ml	210.0	150.0	120.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table 3-q: MINARS DATA FOR RIVER TALPONA CANCONA

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	27°C	29°C	27°C
2	pH	5.81	7.0	7.04
3	Conductivity µs/cm	55.0	0.161	67.7
4	Nitrogen(Nitrate)mg/l	0.216	0.18	0.075
5	Dissolved Oxygen mg/l	6.50	7.83	7.1
6	BOD mg/l	2.50	0.66	0.6
7	Fecal Coli form MPN /100 ml	12.0	7.0	12.0
8	Total Coli form MPN/100 ml	200.0	155.0	170.0
9	Nitrite Nitrogen mg/l	0.032	0.007	BDL

Table3-r: MINARS DATA FOR RIVER ZUARI AT PANCHAWADI

Sr. No	Parameters	July-10	Oct-10
1	Temperature °C	27°C	28°C
2	pH	6.34	6.68
3	Conductivity µs/cm	114.2	0.347
4	Nitrogen(Nitrate)mg/l	0.9496	0.125
5	Dissolved Oxygen mg/l	6.5	6.1
6	BOD mg/l	1.7	1.23
7	Fecal Coli form MPN /100 ml	4.0	
8	Total Coli form MPN/100 ml	120.0	

9	Nitrite Nitrogen mg/l	BDL	BDL
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Table 3-s: MINARS DATA FOR RIVER ZUARI AT CORTALIM

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	28°C	29°C	28°C
2	pH	6.52	6.35	6.7
3	Conductivity µs/cm	27.0	62.5	48.2
4	Nitrogen(Nitrate)mg/l	1.622	0.082	0.423
5	Dissolved Oxygen mg/l	6.8	6.1	6.8
6	BOD mg/l	0.9	2.53	0.6
7	Fecal Coli form MPN /100 ml	NIL	-	5.0
8	Total Coli form MPN/100 ml	95.0	-	125.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table 3-t: MINARS DATA FOR RIVER MANDOVI AT PANAJI

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	26°C	29°C	28°C
2	pH	6.1	6.12	6.28
3	Conductivity µs/cm	41.0	26.05	53.4
4	Nitrogen(Nitrate)mg/l	0.628	0.561	0.192
5	Dissolved Oxygen mg/l	4.55	6.5	7.1
6	BOD mg/l	2.80	1.0	1.1
7	Fecal Coli form MPN /100 ml	12.0	4.0	4.0
8	Total Coli form MPN/100 ml	150.0	150.0	110.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table3-u: MINARS DATA FOR RIVER MANDOVI AT TONCA

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	26°C	29°C	28°C
2	pH	5.3	6.54	6.29
3	Conductivity µs/cm	19.0	0.608	29.22
4	Nitrogen(Nitrate)mg/l	0.172	0.127	0.316
5	Dissolved Oxygen mg/l		6.5	6.5
6	BOD mg/l		1.0	0.6
7	Fecal Coli form MPN /100 ml	21.0	NIL	7.0
8	Total Coli form MPN/100 ml	200.0	110.0	155.0
9	Nitrite Nitrogen mg/l	0.023	BDL	BDL

Table 3-v: MINARS DATA FOR RIVER SELAULIM REVERVOIR

Sr. No	Parameters	July-10	Oct-10	Dec-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	29°C	29°C	29°C	28°C	29°C	28 °C
2	pH	7.1	6.96	5.70	5.66	6.40	6.24
3	Conductivity µs/cm	54.2	0.127	43.5	61.8	61.3	68.4
4	Nitrogen(Nitrate)mg/l	0.289	1.131	0.461	0.432	0.367	0.295
5	Dissolved Oxygen mg/l		7.4	0.9	7.1	7.4	6.5
6	BOD mg/l		0.9	10.0	0.6	09	1.0
7	Fecal Coli form MPN /100 ml	NIL	NIL	10.0	NIL	NIL	NIL
8	Total Coli form MPN/100 ml	120.0	75.0	150.0	95.0	125.0	NIL
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	BDL	0.003	0.006

Table3-w: MINARS DATA FOR AGRICULTURE URAL CANAL U/S OF CUNCOLIM INDL ESTATE

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	29°C	SAMPLE NOT COLLECTED AS THE CANAL WAS DRY	25°C
2	pH	4.92		6.13
3	Conductivity µs/cm	55.4		124.4
4	Nitrogen(Nitrate)mg/l	0.781		0.212
5	Dissolved Oxygen mg/l	6.8		7.1
6	BOD mg/l	0.5		1.6
7	Fecal Coli form MPN /100 ml	28.0		12.0
8	Total Coli form MPN/100 ml	240.0		170.0
9	Nitrite Nitrogen mg/l	BDL		BDL

Table 3-x: MINARS DATA FOR AGRICULTURE URAL CANAL D/S OF CUNCOLIM INDL ESTATE

Sr. No	Parameters	July-10	Oct-10	Jan-11
1	Temperature °C	29°C	31°C	25°C
2	pH	4.40	5.68	6.09
3	Conductivity µs/cm	58.4	1.381	70.6
4	Nitrogen(Nitrate)mg/l	0.766	0.214	0.326
5	Dissolved Oxygen mg/l	5.8	7.48	7.1
6	BOD mg/l	0.5	1.31	1.6
7	Fecal Coli form MPN /100 ml	NIL	NIL	15.015
8	Total Coli form MPN/100 ml	65.0	65.0	200.0
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL

Table3-y: MINARS DATA FOR HARVELEM WATER FALL UP STREM

Sr. No	Parameters	Aug-10	Sep-10	Oct-10	Nov-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	29°C	29°C	28°C	28°C	24°C	25°C	29 °C
2	pH	5.86	7.07	6.84	6.20	7.56	7.62	7.05
3	Conductivity µs/cm	49.8	46.5	0.160	0.165	93.1	100.4	99.6
4	Nitrogen(Nitrate)mg/l	0.46	0.33	-	0.406	0.24	0.32	BDL
5	Dissolved Oxygen mg/l	8.46	7.1	-	7.4	7.1	7.48	5.86
6	BOD mg/l	0.99	0.89	-	0.8	0.6	1.97	1.32
7	Fecal Coli form MPN /100 ml	NIL	NIL	NIL	NIL	Nil	7.0	12.0
8	Total Coli form MPN/100 ml	45.0	95.0	120.0	125.0	105.0	125.0	225.0
9	Nitrite Nitrogen mg/l	BDL	BDL		BDL	0.04	BDL	0.08

Table 3-z: MINARS DATA FOR HARVELEM WATER FALL DOWN STREM

Sr. No	Parameters	Aug-10	Sep-10	Oct-10	Nov-10	Jan-11	Feb-11	Mar-11
1	Temperature °C	29°C	29°C	28°C	28°C	24°C	25°C	28 °C
2	pH	5.88	7.06	7.11	6.20	7.50	7.40	7.12
3	Conductivity µs/cm	47.2	44.4	0.175	0.164	88.2	93.5	54.1
4	Nitrogen(Nitrate)mg/l	0.46	0.471	-	0.76	0.33	0.18	0.12
5	Dissolved Oxygen mg/l	10.75	7.1	-	7.4	7.1	8.14	6.51
6	BOD mg/l	2.30	1.2	-	0.8	0.6	1.65	0.99
7	Fecal Coli form MPN /100 ml	4.0	4.0	NIL	NIL	Nil	11.0	7.0
8	Total Coli form MPN/100 ml	150.0	125.0	150.0	140.0	120.0	150.0	155.0
9	Nitrite Nitrogen mg/l	-	BDL	-	BDL	BDL	BDL	0.04

Table 3-aa: MINARS DATA OF WELL OF VERNA INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	31°C
2	pH	6.31
3	Conductivity µs/cm	0.888 µs/cm
4	Nitrogen(Nitrate)mg/l	0.35
5	Dissolved Oxygen mg/l	7.1
6	BOD mg/l	1.2
7	Fecal Coli form MPN /100 ml	4.0
8	Total Coli form MPN/100 ml	Nil
9	Nitrite Nitrogen mg/l	BDL

Table 3-ab: MINARS DATA OF WELL OF SANCOALE INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	31°C
2	pH	6.44
3	Conductivity µs/cm	0.377 µs/cm
4	Nitrogen(Nitrate)mg/l	0.33
5	Dissolved Oxygen mg/l	6.8
6	BOD mg/l	0.6
7	Fecal Coli form MPN /100 ml	NIL
8	Total Coli form MPN/100 ml	10.0
9	Nitrite Nitrogen mg/l	BDL

Table3-ac: MINARS DATA OF WELL OF ZUARI INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	31°C
2	pH	6.37
3	Conductivity µs/cm	1.001 µs/cm
4	Nitrogen(Nitrate)mg/l	0.44
5	Dissolved Oxygen mg/l	7.1
6	BOD mg/l	1.2
7	Fecal Coli form MPN /100 ml	NIL
8	Total Coli form MPN/100 ml	NIL
9	Nitrite Nitrogen mg/l	BDL

Table3-ad: MINARS DATA OF WELL OF KUMDAIM INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	27°C
2	pH	6.22
3	Conductivity µs/cm	1.038 µs/cm
4	Nitrogen(Nitrate)mg/l	0.121
5	Dissolved Oxygen mg/l	4.23
6	BOD mg/l	0.66
7	Fecal Coli form MPN /100 ml	NIL
8	Total Coli form MPN/100 ml	10.0
9	Nitrite Nitrogen mg/l	0.021

Table 3-ae: MINARS DATA OF WELL OF CORLIM INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	27°C
2	pH	5.05
3	Conductivity µs/cm	0.145
4	Nitrogen(Nitrate)mg/l	0.22
5	Dissolved Oxygen mg/l	5.58
6	BOD mg/l	0.99
7	Fecal Coli form MPN /100 ml	NIL
8	Total Coli form MPN/100 ml	25.0
9	Nitrite Nitrogen mg/l	0.081

Table 3-af: MINARS DATA OF WELL OF PILERNE INDL ESTATE

Sr. No	Parameters	Oct-10
1	Temperature °C	26°C
2	Ph	6.69
3	Conductivity µs/cm	0.90
4	Nitrogen(Nitrate)mg/l	0.82
5	Dissolved Oxygen mg/l	0.58
6	BOD mg/l	0.99
7	Fecal Coli form MPN /100 ml	NIL
8	Total Coli form MPN/100 ml	15.0
9	Nitrite Nitrogen mg/l	0.06

Annexure IV**Table 4-a: MINARS DATA FOR RIVER SAL AT RUMDER NUVEM**

Sr. No	Parameters	June-10	Aug-10	Sep-10	Feb-11
1	Temperature °C	29°C	23°C	27°C	30°C
2	pH	5.28	5.26	6.4	6.1
3	Conductivity µs/cm	101.8 µs/cm	67.6 µs/cm	81.2 µs/cm	80 µs/cm
4	Nitrogen(Nitrate)mg/l	0.032	0.06	0.01	0.950
5	Dissolved Oxygen mg/l	1.3	6.18	6.49	6.18
6	BOD mg/l	0.8	0.99	1.2	1.6
7	Fecal Coli form MPN /100 ml	14.0	11.0		
8	Total Coli form MPN/100 ml	210.0	220.0		
9	Nitrite Nitrogen mg/l	BDL	0.007	BDL	0.004

Table 4-b: MINARS DATA FOR RIVER SAL AT ORLIM

Sr. No	Parameters	June-10	Aug-10	Sep-10	Feb-11
1	Temperature °C	29°C	25°C	26°C	29°C
2	pH	5.96	5.93	6.1	7.00
3	Conductivity µs/cm	1857.0 µs/cm	167.5 µs/cm	101 µs/cm	401.0 µs/cm
4	Nitrogen(Nitrate)mg/l	0.182	0.03	0.03	0.509
5	Dissolved Oxygen mg/l	2.1	5.20	5.50	4.18
6	BOD mg/l	0.7	0.99	1.48	1.6
7	Fecal Coli form MPN /100 ml	14.0	11.0		
8	Total Coli form MPN/100 ml	210.0	210.0		
9	Nitrite Nitrogen mg/l	BDL	BDL	BDL	0.003

Table4-c: MINARS DATA FOR RIVER SAL AT KHAREBAND

Sr. No	Parameters	June-10	Aug-10	Sep-10	Feb-11
1	Temperature °C	29°C	24°C	27°C	28°C
2	pH	5.56	5.52	6.3	6.5

3	Conductivity $\mu\text{s/cm}$	151.2 $\mu\text{s/cm}$.	89.5 $\mu\text{s/cm}$	111.2 $\mu\text{s/cm}$	122.0 $\mu\text{s/cm}$
4	Nitrogen(Nitrate)mg/l	0.045	0.17	0.08	0.652
5	Dissolved Oxygen mg/l	1.0	4.55	4.87	5.53
6	BOD mg/l	0.32	1.3	1.42	1.0
7	Fecal Coli form MPN /100 ml	21.0	14.0		
8	Total Coli form MPN/100 ml	240.0	240.0		
9	Nitrite Nitrogen mg/l	BDL	0.02	BDL	0.004

Table 4-d: MINARS DATA FOR RIVER SAL AT MUNGAL

Sr. No	Parameters	June-10	Sep-10
1	Temperature °C	28°C	27°C
2	pH	5.46	6.8
3	Conductivity $\mu\text{s/cm}$	126.1 $\mu\text{s/cm}$	617 $\mu\text{s/cm}$
4	Nitrogen(Nitrate)mg/l	0.231	0.03
5	Dissolved Oxygen mg/l	1.1	6.0
6	BOD mg/l	0.52	1.8
7	Fecal Coli form MPN /100 ml	14.0	
8	Total Coli form MPN/100 ml	220.0	
9	Nitrite Nitrogen mg/l	0.0013	BDL

Table 4-e: MINARS DATA FOR RIVER SAL AT JAKANI BAND

Sr. No	Parameters	June-10	Aug-10	Sep-10
1	Temperature °C	29°C	24°C	26°C
2	pH	5.12	5.38	6.2
3	Conductivity $\mu\text{s/cm}$	285.8 $\mu\text{s/cm}$	57.4 $\mu\text{s/cm}$	122 $\mu\text{s/cm}$
4	Nitrogen(Nitrate)mg/l	0.038	0.12	0.07
5	Dissolved Oxygen mg/l	3.0	5.53	5.58
6	BOD mg/l	0.66	0.99	1.0
7	Fecal Coli form MPN /100 ml	12.0	14.0	
8	Total Coli form MPN/100 ml	200.0	290.0	
9	Nitrite Nitrogen mg/l	BDL	0.02	BDL

Table4-f: MINARS DATA FOR RIVER SAL AT NAVELIM

Sr. No	Parameters	Aug-10	Feb-11
1	Temperature °C	23°C	30°C
2	pH	5.29	6.7
3	Conductivity µs/cm	86.5 µs/cm	96.0 µs/cm
4	Nitrogen(Nitrate)mg/l	0.09	0.629
5	Dissolved Oxygen mg/l	5.86	4.88
6	BOD mg/l	1.97	1.9
7	Fecal Coli form MPN /100 ml		
8	Total Coli form MPN/100 ml		
9	Nitrite Nitrogen mg/l	0.08	0.002

Annexure V

AMBIENT AIR QUALITY DATA

Table 5-a Station : Panaji

Month & Year	SO ₂ (µ/m ³) Arith Mean	NO _x (µ/m ³) Arith Mean	RSPM (µ/m ³) Arith Mean	SPM (µ/m ³) Arith Mean
April 2010	BDL	15	74	120
May 2010	BDL	10	69	124
June 2010	4.7	11	57	99
July 2010	6.8	16	63	113
Aug 2010	6.5	14	71	117
Sept 2010	BDL	10	45	92
Oct 2010	BDL	14	60	96
Nov 2010	BDL	21	66	106
Dec 2010	5.7	28	120	19.5
Jan 2011	6.7	25	135	231
Feb 2011	6.5	18	133	233
March 2011	5.7	19	119	184

Table 5-b Station : MPT-Mormugao

Month & Year	SO ₂ (µ/m ³) Arith Mean	NO _x (µ/m ³) Arith Mean	RSPM (µ/m ³) Arith Mean	SPM (µ/m ³) Arith Mean
April 2010	5.4	16.2	49.6	93
May 2010	BDL	BDL	46	77
June 2010	7.5	14	46	98
July 2010	7.0	19	74.5	89
Aug 2010	7.5	14	33	75
Sept 2010	BDL	17	42	83
Oct 2010	10	11	51	83
Nov 2010	5.1	21.5	58	92
Dec 2010	6.5	21	77	155
Jan 2011	9.3	20	87	140

Feb 2011	5.3	22	104	190
March 2011	7.2	20	75	135

Table 5-c Station : Vasco da Gama

Month & Year	SO₂ (µ/m³)	NO_x (µ/m³)	RSPM (µ/m³)	SPM (µ/m³)
Arith Mean	Arith Mean	Arith Mean	Arith Mean	Arith Mean
April 2010	5.6	17	61	104
May 2010	BDL	BDL	61	168
June 2010	7.6	16	44	99
July 2010	6.8	20	44	83
Aug 2010	8.3	18	44	78
Sept 2010	4	16	43	83
Oct 2010	BDL	15	44	66
Nov 2010	BDL	21	55	91
Dec 2010	6.6	25	58	106
Jan 2011	8.7	21	68	132
Feb 2011	6	23	94	178
March 2011	6.7	19	83	162

Table 5-d Station : Curchorem

Month & Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Nov. ' 10	10.6	19.87	54.72	14
Dec. ' 10	55.78	13.94	54.72	14
Jan. ' 11	5.49	14.3	138.32	71.9
Feb. ' 11	4.38	12.02	106.73	49.03
March '11	6.43	15.0325	100.85	37.01

Table 5-e Station : Codli

Month & Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Dec. ' 10	9.12	27.81	89.87	23.47
Jan. ' 11	13.87	25.22	95.04	28.76
Feb. ' 11	14.73	23.95	107.41	32.65
March '11	14.06	22.52	152	51.55

Table 5-f Station : Bicholim

Month & Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Nov. ' 10	6.84	108.05	85.13	17.38
Dec. ' 10	9.32	28.6	90.62	22.4
Jan. ' 11	15.09	27.44	100.93	28.42

Feb. ' 11	12.78	19.86	113.77	41.57
March '11	12.11	18.63	171.99	71.67

Table 5-g Station : Honda

Month &Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Nov. ' 10				
Dec. ' 10	8.44	25.29	100.3	22.25
Jan. ' 11	15.3	27.82	126.37	39.65
Feb. ' 11	15.61	22.75	152.62	45.17
March '11	11.18	17.13	247.82	77.73

Table 5-h Station : Assanora

Month &Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Dec. ' 10	5.28	15.55	71.02	
Jan. ' 11	10.26	18.66	72.29	23.25
Feb. ' 11	13.05	20.52	99.7	33.64
March '11	10.87	17.08	120	55.08

Table 5-i Station : Usgao

Month &Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Nov. ' 10				
Dec. ' 10	5.67	10.78	256.56	76.13
Jan. ' 11	7.67	21.56	197.11	80.89
Feb. ' 11	6.38	16.88	332.5	92.13
March '11	3.97	11.23	107.56	61.67

Table 5-j Station : Amona

Month &Year	SO₂ µg/m³	NO_x µg/m³	PM10 µg/m³	PM2.5 µg/m³
Dec. ' 10	12.99	24.52	80.18	24.42
Jan. ' 11	12.99	24.52	80.18	24.42

Feb. ' 11	13.54	24.21	99.11	29.64
March '11	11.34	17.51	111.51	35.23

Annexure VI

Table 6: STATUS OF HAZARDOUS WASTE GENERATED DURING THE YEAR

Sr. No.	Name of the unit & location	Category of waste	Quantity in MT/ Year	Mode of Disposal
1	M/s National Coating Company, Betim	34.3	100 kg/month	To SPCB Authorized Secured landfill
2	M/s Launderaids, Verna Indl Estate	34.3	30 kg/month	To SPCB Authorized Secured landfill
3	M/s Jain Udyog, Sanguem	5.1	250 litres/annum	To recycler registered with CPCB
4	M/s Fomento Resorts & Hotels Ltd, Cidade de Goa, Dona Paula	5.1	150 kg/ annum	To recycler registered with CPCB
		34.3	300 kg/ annum	To SPCB Authorized Secured landfill
5	M/s Creative Gaming Solutions Pvt Ltd, MV San Domino, Panaji	5.1	50 litres/ month	To recycler registered with CPCB
		3.3	1 m ³ / month	To recycler registered with CPCB OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		3.4	2 m ³ / month	To recycler registered with CPCB OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
6	M/s Devyani Food Industries Pvt Ltd, Usgao	5.1	200 kg/ annum	To recycler registered with CPCB
		34.3	300 kg/ annum	To SPCB Authorized Secured landfill
7	M/s Encube Ethicals Pvt Ltd, Madkaim Indl Estate	5.1	0.04 MT/ annum	To recycler registered with CPCB
		28.1	0.25 MT/ annum	To SPCB Authorized Secured landfill OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		33.3	200 nos./ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
		34.3	0.83 MT	To SPCB Authorized Secured landfill OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration

8	M/s Ramacanta Velingkar, BNF Plant, Dharbandora	5.1	350 litres/ annum	To recycler registered with CPCB
9	M/s Reis Magos Fort Resort Pvt Ltd, Verem	5.1	20 litres/ annum	To recycler registered with CPCB
10	M/s John Distilleries Ltd, Cuncolim Indl Estate	5.1	35 litres/annum	To recycler registered with CPCB
11	M/s Cosmos Premises Pvt Ltd, Galaxy Beach Resort, Utorda	5.1	5 kg/ month	To recycler registered with CPCB
		34.3	10 kg/ month	To SPCB Authorized Secured landfill
12	M/s Amiantit Fiberglass Industries India Pvt Ltd, Bicholim	5.1	0.3 tons/ annum	To recycler registered with CPCB
		33.3	600 nos./ month	The Resin should be collected, hardened and disposed in a secured landfill having valid authorisation from GSPCB. The empty barrels should be cut and sold as metal scrap
13	M/s Hindustan Containers, Colvale Indl Estate	3.3	600 litres/ annum	To recycler registered with CPCB OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		5.2	800 litres/ annum	To recycler registered with CPCB OR M/s Spear Petroleum Pvt. Ltd., Kundaim Indl. Estate
		33.3	30 nos./ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
14	M/s CGPPI Adhesive Products Ltd, Kundaim Indl Estate	5.1	10 litres/ annum	To recycler registered with CPCB
		33.3	15 nos./ month	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
15	M/s Bell Tower Resorts Pvt Ltd, Varca	5.1	150 kg/ annum	To recycler registered with CPCB
		34.3	300 kg/ annum	To SPCB Authorized Secured landfill
16	M/s Kundil Alloys Pvt Ltd, Kundaim Indl Estate	5.1	75 litres/ annum	To recycler registered with CPCB
17	M/s Procter & Gamble Hygiene & Health Care Ltd, Kundaim Indl Estate	5.1	3000 litres/ year	To recycler registered with CPCB
		5.2	50 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		21.1	2000 litres/ annum	Sent to M/s Mumbai Waste Management Ltd. at Taloja for incineration
		33.3	5000 nos/ annum	To recycler registered with CPCB
18	M/s CEE JEE Lubricants, Kerala, (Registered Recycler)	5.1	150 KL/ annum	Collection, reception & transportation of Hazardous waste from M/s MRF, Goa to Kerala to Recycle/ Reprocess/ Re-refining used oil by means of technology having Environmentally Sound Mgmt Facility as approved by CPCB
19	M/s Godrej IJM Palm Oil Ltd, Valpoi	5.1	80 litres/ annum	To recycler registered with CPCB
20	M/s Teracom Ltd, Plot No. 102, Kundaim Indl Estate	5.1	25 kg/ month	To recycler registered with CPCB / Reuse for lubrication of moulds
		34.3	300 kg/ month	To SPCB Authorized Secured landfill
21	M/s Nanu Resorts Pvt Ltd, Betalbatim	5.1	30 litres/ annum	To recycler registered with CPCB
22	M/s Finolex Cables, L-117	5.1	12 KL/ annum	To recycler registered with CPCB

	& 118, Verna Indl Estate			
23	M/s Glenmark Generics, Plot S-7, Colvale Indl Estate	5.1	10 kg/ month	To recycler registered with CPCB
		28.3	25 kg/ annum	To SPCB Authorized Secured landfill
		28.4	25 kg/ annum	To SPCB Authorized Secured landfill
		34.3	15 kg/ month	To SPCB Authorized Secured landfill
24	M/s FDC Ltd, Plot no. L-56 & 57, Verna Indl Estate	5.1	0.6 MT/ annum	To recycler registered with CPCB
		28.1	0.72 MT/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.2	0.24 MT/ annum	To recycler registered with CPCB
		34.3	3.6 MT/ annum	To SPCB Authorized Secured landfill
25	M/s Ronil Hotels & Resorts Pvt Ltd, Calangute	5.1	150 litres/ annum	To recycler registered with CPCB
26	M/s Nicomet Industries Ltd, Cuncolim Indl Estate	7.2	700-800 tons/ month	To SPCB Authorized Secured landfill
		5.1	1 KL/ annum	To recycler registered with CPCB
27	M/s Cipla Ltd, Plot no. N-5a, Verna Indl Estate	5.1	396 MT/ annum	To recycler registered with CPCB
		5.2	3.6 MT/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd, Taloja for incineration
		34.1	1.8 MT/ annum	To SPCB Authorized Secured landfill
28	M/s Merck Ltd, Usgao	5.1	4 tons	To recycler registered with CPCB
		20.2	52 tons	To recycler registered with CPCB OR Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		28.4	14 tons	To SPCB Authorized Secured landfill
		33.3	5 tons	To be decontaminated, wash water to be treated in ETP or to be returned to supplier
		34.3	13 tons	To SPCB Authorized Secured landfill
		C14/D6	218 tons	To a party having valid authorisation and consent from SPCB or To SPCB Authorized Secured landfill
		D6	10 tons	To a party having valid authorisation and consent from SPCB OR sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		D2	70 tons	To a party having valid authorisation and consent from SPCB OR To SPCB Authorized Secured landfill
		C8	15 tons	To a party having valid authorisation and consent from SPCB OR To SPCB Authorized Secured landfill
			23 tons	
			20 tons	
		C13	82 tons	To a party having valid authorisation and consent from SPCB OR To SPCB Authorized Secured landfill
		28.5	27 tons	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
			16.5 tons	
		28.1	13.8 tons	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration OR To SPCB Authorized Secured landfill
			5.4 tons	
		6.2	7.5 tons	To recycler registered with CPCB

29	M/s Sai Service Station Pvt. Ltd, Porvorim	5.1	10 tons/ month	To recycler registered with CPCB and having valid authorization of SPCB
30	M/s FDC. Ltd, L-121, Verna Indl Estate	5.1	0.6 MT/ annum	To recycler registered with CPCB
		28.1	0.6 MT/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.2	0.3 MT/ annum	To recycler registered with CPCB
		34.3	6.0 MT/ annum	To SPCB Authorized Secured landfill
31	M/s Sayyed Ahmad & Sons, Margao	5.1	300 KL/ annum	Collection, reception & transportation from Goa State to M/s Patel Petro Pvt. Ltd., Plot No. H-4, MIDC Industrial Area, Gokul, Shirgaon, Kolhapur (for recycling)
32	M/s Finolex Cables Ltd, Ponda	5.1	7800 litres/annum	To recycler registered with CPCB
33	M/s Power Grid Co. of India, Colvale	5.1	0.15 KL/ annum	To recycler registered with CPCB
34	M/s Mandovi Hotels Pvt Ltd, Panaji	5.1	50 kg/ annum	To recycler registered with CPCB
35	M/s Cartini India Ltd -Tivim Industrial Estate	5.1	0.025 MT/ annum	To recycler registered with CPCB
36	M/s Shrusti Envirocare, Quepem	5.1	2100 kg/ month	Collection, reception & transportation to from Goa State to M/s Deepak & Company, Plot No. B-20, Road No. 16, Wagle Indl Estate, Thane (for recycling)
37	M/s Goa Sponge & Power Ltd., Sanguem	5.1	200-250 litres/ annum	To recycler registered with CPCB
38	M/s Vila Goesa Beach Resort, Calangute	5.1	0.02 MT/ annum	To recycler registered with CPCB
39	M/s Hitek Brass Products Pvt Ltd, Kundaim Indl Est.	B3/ C14	5 MT/ month	To recycler registered with CPCB / To SPCB Authorized Secured landfill
40	M/s Marico Ltd, Ponda	5.1	2 MT/ annum	To recycler registered with CPCB
41	M/s Rukminirama Steel Rollings Pvt. Ltd. (Melting Div.) – Cuncolim Indl Est.	5.1	100 litres/ annum	To recycler registered with CPCB
42	M/s. Ajit Kadnekar Bategal Iron Ore Mine, Quepem	5.1	80 litres/ annum	To recycler registered with CPCB
43	M/s. Precitech Components, Honda Indl Estate	5.1	0.4 KL/ year	To recycler registered with CPCB
		5.2	100 kg/ year	Sent to M/s Mumbai Waste Mgmt. Ltd., Taloja for incineration
		33.3	2 nos./ year	To be decontaminated,wash water to be treated in ETP / to be returned to supplier
44	M/s. Gradient Chemicals Co. Pvt Ltd, Cuncolim Indl Estate	33.3	600 nos./ month	To be decontaminated,wash water to be treated in ETP / to be returned to supplier
45	M/s Elegant Offset Printers, Tivim Indl Estate	5.1	50 litres/ year	To recycler registered with CPCB
		5.2	50 kg/ month	Sent to M/s Mumbai Waste Mgmt. Ltd., Taloja for incineration
		33.3	100 nos./ month	To be washed with solvents for removal of residual ink and decontaminated containers to be recycled. Solvents along with the ink to be re-used.

46	M/s. Smt. Sudha Goundalkar, Nirancal Mine, Ponda	5.1	1000 litres/ annum	To recycler registered with CPCB
47	M/s West Coast Shipyard, Rassaim, Loutolim	5.1	20 litres/ month	To recycler registered with CPCB
		33.3	50 nos./ annum	To recycler registered with CPCB
48	M/s Nigel Shipyard Pvt Ltd, Rassaim, Loutolim	5.1	10 litres/ month	To recycler registered with CPCB
		33.3	40 nos./ annum	To recycler registered with CPCB
49	M/s Pralshar Bio Products Pvt Ltd, Kakoda Indl Est.	5.1	10 litres/ annum	To recycler registered with CPCB
50	M/s Sociedade Sri Mahalaxmi Companhia Mineira Limitada, Macodiatolem Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
51	Shri. Bhanudas Cossombo Canvorzorembo Motatembo Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
52	M/s Atchuta Velingkar, Vichundrem Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
53	M/s Crishna Mucunda Camotin, Bencremdando & Gadiabandavoril Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
54	M/s Atchuta Velingkar, Sancordem Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
55	M/s Compania Mineira Progresso Ltda, Marga Fondcul Ou Chicolmolo Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
56	M/s Golden Sands Beach Hotel & Spa Pvt Ltd, Betalbatim	5.1	60 litres/ annum	To recycler registered with CPCB
57	M/s Ion Exchange India Ltd, Verna Indl Estate	5.1	30 litres/ annum	To recycler registered with CPCB
58	M/s Chowgule Industries Pvt Ltd, Navelim	5.1	100 litres/ month	To recycler registered with CPCB
59	M/s Alcon Resort Holdings Ltd, Dona Sylvia, Cavelossim	5.1	100 litres/ annum	To recycler registered with CPCB
60	M/s Ramacanta Velingkar, Corpadega Mine, Sanguem	5.1	1000 litres/ annum	To recycler registered with CPCB
61	M/s Jaisinh Maganlal, Careamol Mine, Quepem	5.1	1000 litres/ annum	To recycler registered with CPCB
62	M/s Caculo Earthmovers, Verna Indl Estate	5.2	3 kg/ month	To be sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
63	M/s Watson Pharma Pvt	5.1	300 litres/ month	To recycler registered with CPCB

	Ltd, Verna Indl Estate	28.4	900 kg/ month	To SPCB Authorized Secured landfill OR To be sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		34.3	700 kg/ month	To SPCB Authorized Secured landfill
		28.2	800 kg/ month	To recycler registered with CPCB
64	M/s Meditab Specialities Pvt Ltd, Kundaim Indl Estate	5.1	0.02 MT/ annum	To recycler registered with CPCB
		28.1	0.092 MT/ annum	To SPCB Authorized Secured landfill OR To be sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.4	0.0029 MT/ annum	To SPCB Authorized Secured landfill OR To be sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		34.3	0.006 MT/ annum	To SPCB Authorized Secured landfill
		33.3	14 nos./ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
		34.1	0.04 MT/ annum	To SPCB Authorized Secured landfill
65	M/s Onkar Industries, D3/11, Tuem Indl Estate	5.1	5 litres/ annum	To recycler registered with CPCB
66	M/s Cocomar Resorts Pvt. Ltd, Longuinhos Beach Resort, Colva	5.1	15 litres/ annum	To recycler registered with CPCB
67	M/s Oriental Containers, Kundaim Indl Estate	5.1	800 litres/ annum	To recycler registered with CPCB
68	M/s Sonatapes Pvt Ltd, Corlim Indl Estate	5.1	50 litres/ annum	To recycler registered with CPCB
69	M/s Hindustan Petroleum Corpn Ltd, LPG Bottling Plant, Kundaim Indl Estate	5.1	500 litres/ year	To recycler registered with CPCB
		21.1	120 kg/ year	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		34.3	300 kg/ year	To SPCB Authorized Secured landfill
70	M/s La Calypso Hotels, Calangute	5.1	0.2 MT/ annum	To recycler registered with CPCB
71	M/s Karthik Alloys Ltd, Cuncolim Indl Estate	5.1	300 litres/ annum	To recycler registered with CPCB
72	M/s Timblo Drydocks, Curchorem	5.1	40 litres/ year	To recycler registered with CPCB
		33.3	1-2 nos./ day	To recycler registered with CPCB
73	M/s Mangal Iron Pvt. Ltd, Madkaim Indl Estate	5.1	45 litres/ annum	To recycler registered with CPCB
74	M/s Goa Energy Pvt Ltd, Bicholim	5.1	35 litres/ annum	To recycler registered with CPCB
75	M/s GKB Vision Ltd, Pilerne Indl Estate	5.1	200 litres/ annum	To recycler registered with CPCB
76	M/s Moksha Hotels Pvt Ltd, Anjuna	5.1	10 litres/ month	To recycler registered with CPCB
77	M/s Sunrise EElectromelt, Cuncolim Indl Estate	5.1	300 litres/ month	To recycler registered with CPCB
78	M/s Vergo Pharma Research, Verna Indl Est	5.1	30 litres/ annum	To recycler registered with CPCB
		34.3	60 kg/ annum	To SPCB Authorized Secured landfill
79	M/s Turbocam India Pvt Ltd, Margao Indl Estate	5.1	300 litres/ annum	To recycler registered with CPCB
80	M/s Alcon Developers, 161	5.1	400 litres/annum	To recycler registered with CPCB

	& 162, Pissurlem Indl Estate	5.2	100 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
81	M/s Bandekar Brothers Pvt Ltd, Kottombi	5.1	500 litres/ annum	To recycler registered with CPCB
82	M/s Sreeja Electricals, Verna Indl Estate	5.1	30,000 litres/ annum	To recycler registered with CPCB
		5.2	120 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		3.3	600 litres/annum 56 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
83	M/s IFB Industries Ltd, 62, 64 & 66, Corlim Indl Estate	5.1	20 litres/ annum	To recycler registered with CPCB
84	M/s Asian Magnetic Devices Pvt Ltd, Verna Indl Estate	B-7	300 kg/ month	To recycler registered with CPCB
		B-10	160 kg/ month	To recycler registered with CPCB
		34.3	100 kg/ month	To SPCB Authorized Secured landfill
85	M/s A.W. Faber Castell (India) Pvt Ltd, Corlim	5.1	50 litres/ annum	To recycler registered with CPCB
		5.2	60 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		33.3	50 nos./ annum	To recycler registered with CPCB
86	M/s Automobile Corpn of Goa Ltd, Pressing Unit, Plant III, Bhiumpal	5.1	75 litres/ annum	To recycler registered with CPCB
87	M/s DeSouza Hotels Resorts, Sun Village, Arpora	5.1	0.15 MT/ annum	To recycler registered with CPCB
88	M/s Titan Timeproducts Ltd, Verna Indl Estate	5.1	250 litres/annum	To recycler registered with CPCB
		5.2	150 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		31.1	500 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		31.2	2500 litres/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		33.3	350 nos./ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
		B4	250 kg/ annum	To recycler registered with CPCB
89	M/s Coastal Sports Ventures Pvt Ltd, M.B. Barcolento, Panaji	5.1	240 litres/annum	To recycler registered with CPCB
		3.4	600 litres/ annum	To recycler registered with CPCB OR sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
90	M/s Access Hospitality Management Pvt Ltd, Presa de Goa, Nagoa	5.1	15 litres/ annum	To recycler registered with CPCB
91	M/s Diamond Tool Industries, Kakoda Indl. Est	5.1	200 litres/ annum	To recycler registered with CPCB
92	M/s Mandovi Distilleries & Breweries Pvt. Ltd., Madkaim Industrial Estate.	5.1	70 litres/ annum	To recycler registered with CPCB
93	M/s Betts India Pvt. Ltd., Verna Indl. Est.	5.1	1,500 lts/ annum	To recycler registered with CPCB
		21.1	1000 kg/ annum	Sent to M/s Mumbai Waste Mgmt Ltd. at Taloja for incineration
94	M/s Shatul Engineering	5.1	200 litres/	To recycler registered with CPCB

	Industries, Kakoda Industrial Estate		annum	
95	M/s Wallace Pharmaceuticals Pvt. Ltd., Curti, Ponda	5.1	100 kg/ annum	To recycler registered with CPCB
		5.2	110 kg/ annum	Sent to M/s Mumbai Waste Mgmt Ltd. at Taloja for incineration
		28.4	15 kg/ annum	To SPCB Authorized Secured landfill
		33.3	150 nos./ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
		34.3	100 kg/ annum	To SPCB Authorized Secured landfill
96	M/s Vivajay Brushes, Pilerne Industrial Estate	5.1	0.1 MT/ annum	To recycler registered with CPCB
97	M/s Cartini India Ltd, Madkaim Indl Estate	5.1	0.8 MT/ annum	To recycler registered with CPCB
		34.3	2.4 MT/ annum	To SPCB Authorized Secured landfill
98	M/s Shirodkar Shipyard, Rassaim	5.1	5 litres/ month	To recycler registered with CPCB
99	M/s Auto Care Centre, Sanguem	5.1	500 litres/month	To recycler registered with CPCB
		5.2	5 kg/month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration.
		33.3	10 nos./ month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration.
100	M/s Salgaocar Mining Industries Pvt. Ltd. (Riverside loading and screening plant at vagus),	5.1	4000 litres/ annum	To recycler registered with CPCB
		35.1	100 kg/annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
101	M/s Caculo Earthmover Pvt. Ltd., Tivim Industrial Estate	5.2	3 kg/ month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
102	M/s Britacel Silicones, Plot no. 192 F, Kundiam Industrial Estate	5.1	2 Kg/ month	To recycler registered with CPCB
		27.1	2 Kg/ month	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration or To SPCB Authorized Secured landfill
103	M/s Schiffer & Menezes India Pvt. Ltd., Verna Industrial Estate	5.1	20 litres/ annum	To recycler registered with CPCB
		21.1	1050 kg/ month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
104	M/s Cosme Remedies Ltd., Alto-Betim	5.1	115 litres/annum	To recycler registered with CPCB
		3.3	25 litres/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.1	5 litres/ annum	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration or To SPCB Authorized Secured landfill
105	M/s Blue Ocean Beverages Pvt. Ltd., Margao Ind. Estate	5.1	5 litres/ annum	To recycler registered with CPCB
106	M/s Raffles Square Development Pvt. Ltd., Candolim	5.1	40 litres/ annum	To recycler registered with CPCB
		34.3	10 KL/ annum	To SPCB Authorized Secured landfill
107	M/s V.M.Salgaocar & Bros. Pvt. Ltd. (Goa Marriot Resort), Miramar	5.1	1 KL/ annum	To recycler registered with CPCB
108	M/s Bharat Conductors Pvt. Ltd, Sancoale Indl Est	5.1	500 litres/ annum	To recycler registered with CPCB

109	M/s Duraline India Pvt. Ltd, Verna Indl Estate	5.1	3500 lts/annum	To recycler registered with CPCB
		5.2	0.1 MT/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
110	M/s Excel Enterprises, Verna Indl Estate	33.3	7 nos./ month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
111	M/s Goa Pet Products, Verna Indl Estate	5.1	10 litres/ month	To recycler registered with CPCB
112	M/s Medispray Labs Pvt Ltd, Kundaim Indl Estate	5.1	100 litres/annum	To recycler registered with CPCB
		28.4	10 kg/ annum	To SPCB Authorized Secured landfill
		33.2	10 kg/ annum	To SPCB Authorized Secured landfill
		33.3	1 no./ annum	To be decontaminated,wash water to be treated in ETP / to be returned to supplier
113	M/s Chowgule & Co Pvt Ltd, Shipbuilding Division, Rassaim	5.1	100 litres/annum	To recycler registered with CPCB
		33.3	1200 tins/annum	To recycler registered with CPCB
		A-5	96 tons/ annum	To SPCB Authorized Secured landfill
114	M/s Elin Electronics Ltd, Verna Indl Estate	5.1	50 litres/ month	To recycler registered with CPCB
		B-10	160 kg/ month	To recycler registered with CPCB
		B-7	300 kg/ month	To recycler registered with CPCB
115	M/s Sai Service Station Ltd, Mapusa Indl Estate	5.1	250-300 lts/mth	To recycler registered with CPCB
		5.2	5-7 kg/ month	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
116	M/s Ratiopharm India Pvt Ltd, Verna Indl Estate	5.1	100 litres/ month	To recycler registered with CPCB
		28.2	400 kg/ month	To recycler registered with CPCB
		28.3	10 kg/ month	To SPCB Authorized Secured landfill
		28.4	50 kg/ month	To SPCB Authorized Secured landfill
		34.3	125 kg/ month	To SPCB Authorized Secured landfill
117	M/s Nestle India Ltd, Bicholim	5.1	3000 litres/ annum	To recycler registered with CPCB <u>OR</u> Re-use by mixing with FO for boiler
118	M/s Nestle India Ltd, Usgao Indl Estate	5.1	7000 litres/ annum	To recycler registered with CPCB <u>OR</u> Re-use by mixing with FO for boiler
119	M/s Surekleen Services Pvt Ltd, Pilerne Indl Est.	5.1	12 litres/ annum	To recycler registered with CPCB
120	M/s Puma Stationery Pvt Ltd, Corlim	5.1	90 litres/ annum	To recycler registered with CPCB
		33.3	50 nos./ annum	To recycler registered with CPCB
		5.2	100 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
121	M/s Dempo Shipbuilding & Engineering Pvt Ltd, Bandora, Ponda	5.1	100 litres/ annum	To recycler registered with CPCB
		33.3	300 nos./annum	To recycler registered with CPCB
122	M/s Super Services, Cortalim	33.3	120-125 nos./ annum	To recycler registered with CPCB
123	M/s Meta Copper & Alloys Ltd, Zuarinagar	5.1	7 KL/ annum	To recycler registered with CPCB
		6.4	250 MT/ annum	To recycler registered with CPCB
		8.3	2000 MT/annum	To recycler registered with CPCB
		B-3 & C-14	40 MT/ annum	To SPCB Authorized Secured landfill
		5.2	26 MT/ annum	To recycler registered with CPCB <u>OR</u> Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration

124	M/s Special Oils, Dharwad, Karnataka	5.1	200 KL/ annum	Collection, reception & transportation of Hazardous waste from M/s Sesa Goa Ltd., Goa and M/s Reliance Infrastructure Ltd., Goa to Karnataka to Recycle/ Refining used oil by means of technology having Environmentally Sound Mgmt. Facility as approved by CPCB
125	M/s Industrial Esters & Chemicals Pvt. Ltd, Thane	5.1	4500 MT/ annum	Collection, reception & transportation of Hazardous waste from Goa State to Maharashtra to Recycle/ Refining used oil by means of technology having Environmentally Sound Mgmt. Facility as approved by CPCB
		5.2	6000 KLA	Collection, reception & transportation of Hazardous waste from Goa State to Maharashtra to Recycle/ Refining used oil by means of technology having Environmentally Sound Mgmt. Facility as approved by CPCB
126	M/s City Metal Works & Coats, Margao Indl Estate	34.3	50 kg/ annum	To SPCB Authorized Secured landfill
127	M/s Lafarge Aggregates & Concrete India Pvt Ltd, Sancoale, Zuarinagar	5.1	0.05 MT/ annum	To recycler registered with CPCB
128	M/s Lafarge Aggregates & Concrete India Pvt Ltd, Pilerne Indl Estate	5.1	0.05 MT/ annum	To recycler registered with CPCB
129	M/s Praka Engineering, Bicholim	33.3	80-100 nos./ annum	To recycler registered with CPCB
130	M/s Venture Resort Holding, Hotel Vivenda, Calangute	5.1	100 litres/ annum	To recycler registered with CPCB
131	M/s Case de Goa, Calangute	5.1	10 kg/ month	To recycler registered with CPCB
132	M/s V.G. Quenim, Sonshi Mine	5.1	3600 litres/ year	To recycler registered with CPCB
		5.2	1000 kg/ year 52 kg/ year	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
133	M/s Goa Medicare Devices Pvt. Ltd, Verna Indl Estate	5.1	1.5 KL/ annum	To recycler registered with CPCB
134	M/s Andrew Telecommunication India Pvt Ltd, Plot No. N-2, Verna Indl Estate	5.1	1000 KL/ annum	To recycler registered with CPCB
		5.2	1000 KL/ annum	To recycler registered with CPCB OR sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		12.1	6000 KL/ annum	To SPCB Authorized Secured landfill
		12.2	5000 KL/ annum	To SPCB Authorized Secured landfill
		12.4	2000 KL/ annum	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		12.5	6000 KL/ annum	To SPCB Authorized Secured landfill
		12.9	100 KL/ annum	To SPCB Authorized Secured landfill
		22.1	4000 kg/ annum	To SPCB Authorized Secured landfill

		22.2	500 kg/ annum	Sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		33.1	1500 KL/ annum	To be sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
		33.3	3000 KL/ annum	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
135	M/s Andrew Telecommunication India Pvt Ltd, Plot No. L58 to 60, Verna Indl Estate	5.1	500 litres/annum	To recycler registered with CPCB
		5.2	500 kg/ annum	To recycler registered with CPCB OR sent to M/s Mumbai waste Mgmt. Ltd., Taloja for incineration
136	M/s Greater Ferramet, Centralised Store & Workshop, BNF & Dry Screening Plant, Santona	5.1	25 MT (Store & workshop)	To recycler registered with CPCB
			1.0 MT (Iron ore BF plant)	
			0.6 MT (dry screening & crushing plant)	
137	M/s V.M. Salgaocar & Bro Pvt Ltd, Sacorda Malpona Mine	5.1	500 litres/annum	To recycler registered with CPCB
		5.2	20 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd (MWML) at Taloja for incineration
138	M/s V.M. Salgaocar & Bro Pvt Ltd, Sigao Mine	5.1	1200 lts/ annum	To recycler registered with CPCB
		5.2	50 kg/ annum	Sent to M/s Mumbai Waste Mgmt. Ltd (MWML) at Taloja for incineration
139	M/s Lokmat Newspaper Pvt Ltd, Verna Indl Estate	5.1	200 litres/ month	To recycler registered with CPCB
		21.1	250 kg/ month	Sent to M/s Mumbai Waste Mgmt. Ltd (MWML) at Taloja for incineration
140	M/s Macbrout Engineering Pvt Ltd, Margao Indl Est	5.1	120 litres/ annum	To recycler registered with CPCB
141	M/s Palmarina Resorts, Calangute	5.1	0.05 MT/ annum	To recycler registered with CPCB
142	M/s Goenca Resorts Pvt Ltd, Resort Marinha Dourado, Arpora	5.1	50 litres/ annum	To recycler registered with CPCB
143	M/s Chowgule & Co Pvt Ltd, Shipbuilding Division, Rassaim	5.1	50 litres/ annum	To recycler registered with CPCB
		33.3	100 tins/ month	To recycler registered with CPCB
		A-5	10 tons/ month	To SPCB Authorized Secured landfill
144	M/s Plus Lubricants, Maharashtra (Registered Recycler)	5.1	3750 KL/ annum	Collection, reception & transportation of Hazardous waste from M/s Mormugao Port Trust, Goa to Maharashtra to Recycle/ Refining used oil by means of technology having Environmentally Sound Mgmt. Facility as approved by CPCB
		5.2	3750 KL/ annum	Collection, reception & transportation of Hazardous waste from M/s Mormugao Port Trust, Goa to Maharashtra to Recycle/ Refining used oil by means of technology having Environmentally Sound Mgmt. Facility as approved by CPCB
145	M/s Goa Carbon Ltd,	5.1	150 – 400 litres/	To recycler registered with CPCB

	Margao		annum	
		5.2	240 kg/ annum	To be incinerated in the settling chamber of the kiln
146	Ms/ Aventis Pharma Ltd, Verna Indl Estate	5.1	2.0 MT	To recycler registered with CPCB OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		5.2	0.5 MT	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		26.1	0.05 MT	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.1	12 MT	To SPCB Authorized Secured landfill OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.4	12 MT	To SPCB Authorized Secured landfill OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		28.5	5 MT	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		33.3	15,000 Nos.	To be decontaminated, wash water to be treated in ETP / to be returned to supplier
			6 MT	
		34.1	1 MT	To SPCB Authorized Secured landfill OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		34.2	0.5 MT	To SPCB Authorized Secured landfill OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
		34.3	2 MT	To SPCB Authorized Secured landfill OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
147	M/s Angels Holiday Resort, Porvorim	5.1	30 litres/ annum	To recycler registered with CPCB
148	M/s Denora India Ltd, Kundaim Indl Estate	5.1	260 litres/annum	To recycler registered with CPCB
		34.3	500 kg/ annum	To SPCB Authorized Secured landfill
149	Shri Ajit Kadnekar, Chunimolo Mine, Sanguem	5.1	80 litres/ annum	To recycler registered with CPCB
150	M/s Computer Graphics Ltd, Sancoale Indl Estate	5.1	10 litres/ annum	To recycler registered with CPCB
151	M/s PTI, Advona Toleamati-e-Galiguro Mine, Sanguem	5.1	136 litres/ annum	To recycler registered with CPCB
152	M/s PTI, Bondra Advona Codli Mine, Sanguem	5.1	992 litres/ annum	To recycler registered with CPCB
153	M/s Pravinkumar Gosalia, Shakti Bauxite Mine, Quepem	5.1	50 kg/ annum	To recycler registered with CPCB
154	M/s Ulka Sea Foods, Unit I, Marcela	5.1	100 litres/ month	To recycler registered with CPCB
155	M/s Roz Bal Industries, Bethora Indl Estate	5.1	20 kg/ annum	To recycler registered with CPCB
		34.3	150 kg/ annum	To SPCB Authorized Secured landfill
156	M/s Kunda Gharse, Cudnem Mine, Sanquelim	3.3	171 nos./ year	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration

		5.1	2400 litres/ year	To recycler registered with CPCB
		5.2	700 kg/ year	Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration
157	M/s Dempo Shipbuilding & Engg Pvt Ltd, Bainguinim	5.1	300 litres/annum	To recycler registered with CPCB
		33.3	400 nos./annum	To recycler registered with CPCB
158	M/s Vailankani Power Laundry, Chinchinim	34.3	300 kg/ month	To SPCB Authorized Secured landfill
159	M/s Silver Sands Holiday Village, Candolim	5.1	25 litres/ annum	To recycler registered with CPCB
		34.3	25 kg/ annum	To SPCB Authorized Secured landfill
160	M/s V.M. Salgaocar & Brother Pvt. Ltd. Casino BOA SORTE, Panaji	5.1	300 litres/annum	To recycler registered with CPCB
		3.4	100 litres/ month	To recycler registered with CPCB OR Sent to M/s Mumbai Waste Mgmt. Ltd. at Taloja for incineration

Annexure VII

Table 7: STATUS OF BIO-MEDICAL WASTE GENERATED DURING THE YEAR 2010-2011

Health Care Facilities (HCF) under Schedule VI of the Rules	Total no. of HCF	Total no. of Beds	No. of CBWTF/Private agencies	No. of HCF which are utilising CBWTF	No. of HCF having treatment and disposal facilities	No. of HCF applied for Authorisation	No. of HCF granted Authorisation	Total no. of treatment equipment (excluding CBWTF)					Total Qty of BMW generated kg/day	Total Qty of BMW treated kg/day	No. of Health Care Facilities violated BMW Rules	Total no. of Show Cause Notices issued to defaulter HCF
								Incinerator	Autoclave	Micro wave	Hydroclave	Shredder				
								With APCD	Without APCD							
A) Hospitals & Nursing homes in town with population of 30 lakhs and above NIL																
B) Hospitals & Nursing homes in town with population below 30 lakhs:																
a) with 500 beds and above	1															
b) with 200 beds but less than 500 beds	1															
c) with 50 beds but less than 200 beds	13															
d) with less than 50 beds	216															
		4271	NIL	NIL	1	234	226	NIL	2	52	1		2437.6847	2437.6847	1	1
C) All other institutions generating bio-medical waste not included in A) and B) 3																
Total	234	4271	NIL	NIL	1	234	226	NIL	2	52	1		2437.6847	2437.6847	1	1

Annexure VIII

Table 8: SYNOPSIS OF MAJOR CASES PENDING IN THE HIGH COURT OF BOMBAY AT GOA.

Sr. no.	Case	Synopsis
1.	V/s State of Goa & Ors. S.M.W.P. no. 02/2007	<p>The matter pertains to Suo Motu cognizance taken by the Hon. High Court of Bombay at Goa with regard to disposal of municipal solid waste, waste generated by Municipalities and Village Panchayats and disposal of bio-medical waste in the State of Goa. Vide the present petition, the Hon. High Court has issued various directions to the Municipalities and Coastal Village Panchayats directing them to take steps to ensure that the disposal of waste generated within their respective jurisdiction is done in an environmentally sound manner and in accordance with the Municipal Solid Waste Rules 2000.</p> <p>The Board has conducted numerous inspections of the waste disposal facilities of the municipalities and Village Panchayats and has submitted reports in this regard to the Hon. High Court. Presently the Court with the assistance of the Board is ensuring that the Municipal Solid Waste and waste generated by Municipalities in the State as also the Village Panchayats is stored and disposed off in an environmentally sound manner till such time as all the Municipalities and Panchayats set up adequate Waste treatment and disposal facilities.</p>
2.	Villagers of Sirigao v/s Sirigao Nagratan Sangattan P.I.L. W.P. no. 01/2008	<p>The present petition was filed by the Villagers of Sirigao alleging that operation of three mining units in the Village of Sirigao, Bicholim, Goa was resulting in environmental pollution of the vicinity and depletion of water resources. The Hon. High Court directed NEERI to conduct a study and to submit a report with regard to measures for mitigation of the alleged pollution and depletion of water resources.</p> <p>NEERI has submitted the said report to the Hon. High Court. The Board also issued directions to the three mining units to comply with certain directions and also various recommendations of NEERI in order to mitigate pollution caused in Sirigao Village due to the operation of the mines. The Board is presently monitoring compliance of the said directions and is periodically informing the Court with regard to the same.</p>
3.	Concerned Citizens of Vasco V/s MPT and Ors. S.M.W.P. no. 08/2001	<p>The present petition was filed by the Citizens of Vasco alleging that coal handling operations at berth nos. 10 and 11 is resulting in serious air pollution in Vasco town. The Court directed NEERI to conduct a study of MPT in order to suggest measures to control pollution as alleged in the petition. NEERI</p>

		conducted the said study and submitted a report. The Board had issued various directions to MPT to comply with certain measures as also the recommendations contained in the report of NEERI. The Board is currently monitoring compliance of these directions and is reporting the same to the Hon. High Court.
4.	Mr. John Pereira V/s State of Goa & Ors. W.P. no. 123/1999	Vide the present Petition the Hon. High Court of Bombay at Goa is considering the issue of dust pollution at Curchorem town due to unloading and unloading activities at the Curchorem railway yard. The Board has conducted a detailed inspection of the railway yard and has submitted certain conclusions and recommendations to contain dust pollution. The Hon. High Court has issued directions for compliance of the same. The Board is monitoring the said compliance and is reporting the same to the Hon. High Court.

Annexure IX

Table 9: TABLE DETAILS OF NUMBER OF REQUESTS RECEIVED, DISPOSED OFF, REJECTED, FEES COLLECTED, APPEALS PREFERRED TO THE FIRST APPELLATE AUTHORITY, OUTCOME OF APPEALS UNDER RTI ACT, 2005 FOR THE THE FINANCIAL YEAR APRIL 2008 TO MARCH 2009

Sr no	Name of the Public Authority	Names/ Designation of the PIO	No. of request made under section 6	No. of request received by PIO	No. of request where the information is provided within statutory period of 30days	No. of request where no decision is communicated	No. of request rejected - quoting the relevant provisions of the RTI Act	Amount of application fees collected	Amount of Charges collected towards the supply of Information	No. of cases in which the information supplied free of cost and no. of pages	No. of first appeals filed	No. of appeals allowed within the time limit by first Appellate Authority	No. of appeals rejected by the first Appellate Authority	No. of appeals where no decision is taken even after the expiry of statutory period
1	Goa State Pollution Control Board	Shri. Srinet kothwale (Member Secretary)	173	173	173	173	2 Company Associates	1460/-	5394/-	1 case 1 CD	6	6		

Annexure X

Table 10: DETAILS OF THE FIRE-CRACKERS AND THE TESTING CONDUCTED TO ASSESS THE COMPLIANCE OF NOISE LEVEL STANDARDS PRESCRIBED UNDER ENVIRONMENT (PROTECTION) RULES, 1986

Sr.No.	Name of Company	Brand Name of fire cracker	Sound pressure level IMPULSE (Max) measured in dB(A)
Single Crackers			Max. allowable decibel = 125
1.	Gem Fire Works	Laxmi Bomb	106
2.	Standard Fire Work	Kargil Bullet	103
3.	Raj Industries, Buldhana	Border Star Bomb	106
4.	Shama Fire Works, Jalgaon	Volcano	107
5.	Standards Fire Works	Singing Bird	104
6.	Standards Fire Works	AK-47	110
7.	Gem Fire Works	60 multi colour shot	114
8.	Standards Fire Works	Thunder Bomb	117
9.	Ajanta Fire Works	Cheetos	140
10.	Standards Fire Works	Sky Buster - 130	125
11.	Standards Fire Works	Atom Bomb	106
12.	Shri Kaliswar Fire Works	Supper Star Rocket	108
13.	StandardS Fire Works	Cracking King	103
Crackers in Series			Max. allowable decibel = 105
14.	Shri Daivam Fire Works, Shivkashi	2000 WALA	117
15.	Coronation Booth	Lavangi	111