



Environmental Monitoring Report

Project Number: 40156-023
August 2015

Period: July 2014 – December 2014

IND:MFF - Sustainable Coastal Protection and Management Investment Program - Tranche 1

Submitted by

Project Management Unit, Government of Karnataka, Mangaluru

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Asian Development Bank



GOVERNMENT OF KARNATAKA

[Department of Ports & Inland Water Transport]

No. PMU/ADB/T1/EMR/2014-15 / 504

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Project Management Unit
Sustainable Coastal Protection &
Management Investment Program
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Date: 30-03-2015

To

M. Teresa Kho
Country Director,
Asian Development Bank
New Delhi.

Sir,


Sub:- MFF0049-IND/Loan No. 2679- Sustainable Coastal
Protection & Management Investment Program -Karnataka-
Submission of Environmental Monitoring Report for
Tranche -I Sub project- Reg.

Following the instructions received by ADB's safeguard specialist during
the ADB's safeguard mission held from 28th to 30th of January 2015, hereby
submitting Environmental Monitoring Report for Tranche-I for the period July
2014 to December 2014.

Thanking You,

Yours faithfully,

Encl: Environmental Monitoring
Report July 2014 to Dec 2014


Project Director
Project Management Unit
SCP&MIP, Mangaluru

Copy submitted to

1. Mr. Harish Kumar Varma, Senior Project Officer, Asian Development Bank, New delhi for kind information.
2. Mr. Girish R. Mahajan, Senior Environmental Officer, Asian Development Bank, New delhi for kind information.
3. Mr. Ramesh C. Swarankar, Senior safe guard Officer, Asian Development Bank, New delhi for kind information.
4. PMDC-K for information



Environmental Monitoring Report

Loan Number: 2679

Reporting period: (July2014 to December2014)

(MFF - Sustainable Coastal Protection and
Management Investment Program -Tranche
1)

Implementing Agency: Project Management Unit, Public Works, Ports and Inland
Water Transport Department

Executing Agency:

Date: (28/02/2015)

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List of Abbreviations

ADB	Asian Development Bank
CBO	Community Based Organization
CD	Chart Datum
CIMU	Coastal Infrastructure Management Unit
CMIS	Coastal Management Information System
CMZ	Coastal Management Zone
CPCB	Central Pollution Control Board
CRZ	Coastal Regulation Zone
CWC	Central Water Commission
CWPRS	Central Water and Power Research Station
Db	Decibel
DPR	Detailed Project Report
EIA	Environmental Impact Assessment
EPA	Environment Protection Act
GIS	Geographical Information System
GoI	Government of India
GoK	Government of Karnataka
HTL	High Tide Line
ICMAM	Integrated Coastal and Marine Area Management
ICZMA	Integrated Coastal Zone Management Authority
KPI	Key Performance Indicator
KSCPM	Karnataka Sustainable Coastal Protection and Management
KSCZMA	Karnataka State Coastal Zone Management Authority
KRSRAC	Karnataka State Remote Sensing Application Centre
LTL	Low Tide Line
MoEF	Ministry of Environment, Forests and Climate Change
MFF	Multi Financing Facility
NCPP	National Coastal Protection Project
NGO	Non-Governmental Organization
NHC	Northwest Hydraulic Consultants
O&M	Operation and Maintenance
P&IWT	Ports & Inland Water Transport
PMDC	Project Management and Design Consultants
PPMS	Project Performance and Management System
PPP	Public Private Partnership
PPTA	Project Preparation Technical Assistance
SCPMIP-K	Sustainable Coastal Protection and Management Investment Program – Karnataka
SEA	State Executing Agency
SEIAA	State Environmental Impact Assessment Agency
SMO	Shoreline Management Organisation
SMP	Shoreline Management Plan
SPCB	State Pollution Control Board
ToR	Terms of Reference
UMC	Ullal Municipal Council

1. Introduction

The National Coastal Protection Project (NCP) estimates that 50% of the total of 1,100 km of coastline in the three states of Maharashtra, Goa and Karnataka is facing erosion to some degree. Half of the 300 km coastline of Karnataka is subject to significant coastal erosion and only 58 km has some degree of protection.

The coastal zone is a key part of the economy, supporting agricultural and horticultural activities, fishing, aquaculture, sand and shell mining, harbour development, trade and transport. Rural communities and urban areas are affected by coastal erosion. Rising sea levels and increasing numbers and intensities of storms will result in serious erosion hazards. To address its coastal protection and management issues, the Government of Karnataka has agreed with the Asian Development Bank (ADB) to implement the Sustainable Coastal Protection and Management Investment Program (SCPMIP). The budget for the first tranche of SCPMIP-K amounts to US\$ 48.549 million covering the period Jan 2012 - June 2017.

Overall Project Description

The 1st Tranche sub-project in Ullal consist of 4 components viz., rehabilitation of Ullal breakwaters, construction of two off-shore reefs, construction of four in-shore berms and sand nourishment. A brief description of these projects are as follows.

Inshore Berms - 4 numbers of Inshore berms are 'T' gryone like structure, forming a length of 120m each placed into sea. The construction of the four in-shore berms commenced in December 2013 with a construction period of 20 months. The construction materials used are sand filled geotextile bags and containers.

Breakwaters – The existing Ullal breakwaters are in dilapidated condition and requires immediate rehabilitation. With proposed rehabilitation, the structure will become more robust and adapted to future sea level rise. The southern breakwater will become slightly shorter to allow an increase of sand moving towards the Ullal frontage. Agreement for rehabilitation of breakwaters was signed on 31/07/2014 and the Commencement date was fixed as 01/12/2014

Off-Shore Reefs – Off Shore reefs are cup shaped structures to be constructed at 700m off shore at a depth of -7m w.r.t. to local Chart Datum(CD). Main function of these structures are to break the waves at off shore and reduce the wave intensity before it reaches the coastline. Agreement for construction of 2 off shore reefs was signed on 07/11/2014 and the Commencement date was fixed as 01/12/2014.

Sand Nourishment is the process of transporting sand from deeper sections of the sea and feed it to the foreshore to create a new beach or widen the existing beach. Sand nourishment does not stop erosion; but is an essential component to balance the process of erosion and accretion, thus safeguarding the protection of livelihoods and properties. 2x 450,000 m³ of sand nourishment is proposed on the Ullal frontage after the construction of the above 3 components.

Project Objectives

The overall objective of SCPMIP-K is to address the immediate coastal protection needs through the implementation of economically viable protection works using environmentally and socially appropriate solutions. In order to achieve this over-arching objective for SCPMIP-K there are a number of key objectives that must be fulfilled, these being;

1. **To address the causes and likely causes of coastal erosion and coastal instability**, directed mainly at other coastal infrastructure that is presently causing, or potentially causing damage to the natural coastal processes.
2. **To support investments for natural protection measures such as the development** and planting of dunes, planting of mangrove or other trees for protection or shelter.
3. **To consider wider coastal management issues** surrounding water quality, navigational entrances, dredging and training of river and drain mouths.
4. **To consider increase of economic and amenity value** of the coast and shoreline.
5. **To develop the institutional capacities to meet the long term needs of sustainable coastal protection and management.** This includes the development of the capacities at central, state and district level in shoreline planning, detailed planning, modelling, design; and coordination and management of coastal infrastructure.

In parallel to the investment program, the project will develop institutional capacities to meet long term needs of sustainable coastal protection and management. The project will support initiatives to increase the participation of the private sector and communities in the planning, design, financing, implementation and maintenance of coastal protection and management projects. The project supports the development of a number of economic initiatives in the coastal zone; where appropriate private sector participation would be incorporated into the project strategies. All investment projects should be implemented based on participative planning, professional design using innovative approaches.

Environmental Category

The approved environment category of the Project is A; and ADB's Environment Policy (EP) (2002) is applicable for this Project.

Environmental Performance Indicators

The environmental performance indicators have been framed with the objective of carrying out project progress review. The performance Indicators has been evaluated as per following three heads:

- (i) Environmental condition indicators to determine efficiency of environmental management measures in control of air, noise, soil and water pollution.
- (ii) Environmental management indicators to determine compliance with the suggested mitigation measures.
- (iii) Indicators regarding Communication of requirements with respect to ADB's environmental & social safeguards, national & state level Environmental rules & regulations.

2. Compliance Status with National/State/Local Statutory Environmental Requirements

The Tranche -1 project has been accorded with CRZ clearance, apart from this the contractors are responsible for obtaining consent to establish and operate batching plants and use of DG sets if any from the Karnataka State Pollution Control Board(KSPSB). Contractors to obtain and submit Pollution Under Control(PUC) of all the construction vehicles.

Table 2.1: Subproject wise Compliance Status

SI No	Sub Project Component	Statutory Environmental Requirement	Compliance Status
1	Construction of four Inshore Berms	PUC Certificates for contractors vehicles	Yet to issue
2	Rehabilitation of Ullal Breakwaters	PUC Certificates for contractors vehicles	Yet to issue
		Consent to Establish and Operate batching Plant	Applied
		Construction materials are sourced by the contractor from licensed and statutorily compliant mines and quarries. Contractor to provide permits/license/clearances of such quarries/mines.	Yet to issue
3	Construction of two off shore reefs	PUC Certificates for contractors vehicles	Yet to issue
		Construction materials are sourced by the contractor from licensed and statutorily compliant mines and quarries. Contractor to provide permits/license/clearances of such quarries/mines.	Yet to issue

3. Compliance Status with the Environmental Covenants as Stipulated in the Loan Agreement

Environmental Covenants	Status
Each State shall cause its SEA to: (a) Ensure that the Subprojects under the Project are undertaken and that all Project facilities are designed, implemented, operated and maintained in accordance with all applicable laws, and regulations of the Borrower, the State, and ADB's Environment Policy (2002), and the EARF;	Statutory CRZ clearances have been obtained for all the sub-projects except for consents to operate construction plants. The requisite applications will be filed with respective regulatory agencies. The contract documents include agreed EMPs.
(b) Prepare and implement the necessary IEE/EIA as applicable, and EMP (with budget) in accordance with the EARF. For Subprojects, the environmental categorization and assessment procedures defined in the EARF shall be followed. For any environment category A or B sensitive Subproject, a SEIA/SIEE as applicable shall be prepared and made available to the public 120 days before the Subproject is submitted to ADB for approval. Each State through its SEA shall monitor, audit, and report to ADB twice a year on the implementation of the EMPs for each Subproject.	The EIA report (including EMP) for all sub-projects has been approved by ADB in 2010; and the mandatory disclosure of 120 days was followed prior to approval of sub-projects. This is the second semi-annual report on the implementation of the EMPs for each Subproject.

4. Compliance Status with Environmental Management and Monitoring Plans as Stipulated in the Environmental Documentation as agreed with ADB

This section presents the compliance status of Environmental Management and Monitoring Plans of tranche-1 subproject under implementation.. During this reporting period (July 2014- December2014) only inshore berms construction has started , agreement for construction of off shore reefs and rehabilitation of breakwaters were signed and the contractors are mobilizing men and machineries. One time environmental quality monitoring was conducted during the reporting period near the inshore berm construction site in the month of October 2014. The Inshore berm contractor has not prepared any Environmental Implementation Plan. He is following the EMP, which is part of the IEE and Contract document. In addition to that, guidelines on general construction EHS measures to be followed / implemented by the Contractor.

Project Activity	Potential Environmental Impact	Proposed Mitigation Measures	Monitoring Method	Compliance Status	Institutional Responsibilities
Pre Construction Stage					
Site preparation: material and equipment Staging areas and beach access locations	Possible removal of terrestrial habitat	<ul style="list-style-type: none"> Sites rehabilitated before contractor leaves site upon completion of construction activities. Planting and stabilization of site, including replacement of any native plant species. 	Visual Observation	There are no terrestrial habitat present near inshore berms site. Although the PMU will make sure the site will be rehabilitated, if required before the contractor leaves.	PMU Contractor
Construction Stage					
Berm Construction Offshore reef construction. Breakwater construction	Air quality	Physical			
	Reduction in Air quality from exhaust fumes and dust at on-land construction sites	<ul style="list-style-type: none"> Adherence to national emission and ambient quality standards Engines and generators turned off when not in use Equipment conforms to international standards. Dust suppression by regular sprinkling (i.e. morning and evening) or other means. Possibly, halt work during excessive onshore winds. Verbal social complaints dealt with immediately and efficiently. 	Visual Observation, AAQM once every season.	Air quality Monitoring carried out in October 2014 near inshore berm site and found to be within permissible limit . Water sprinkling is being done. Contractors have been instructed to submit Pollution Under Control certificates.	PMU Contractor

	Noise Increased noise levels	<ul style="list-style-type: none"> • Adherence to national noise standards. • Engines and generators turned off when not in use • Equipment conforms to international standards • Vehicles and engines fitted with silencers • Daily checks and remedy of potential sources of excessive noise especially out of daylight hours. • Complaints regarding noise dealt with professionally and with respect. • Rock transport plan from quarries to rock transshipment Storage site prepared and adhered to. 	Noise monitoring, visual observation	Noise monitoring carried out in October 2014 and found to be within permissible limit	PMU Contractor
	Water quality High turbidity during reef filling Possible leaks or spills—sediment, fuels, oil, other fluids	<ul style="list-style-type: none"> • Supervision of all operation procedures to minimize spillage of sand • Contingency plans for accidental oil, fuel, and sediment spills should be initiated immediately 	Water quality monitoring, visual observation	Water quality monitoring was carried out in October 2014 and found to be within permissible limit.	PMU Contractor
		Biological			
	Marine biota and habitat Reefs and berms will cover soft-sediment benthic habitat and biota High turbidity and sediment settlement temporarily impair photosynthesis and biological production in adjacent offshore areas Possible leaks or spills---sediment fuels, oil, other	<ul style="list-style-type: none"> • Develop mitigation components based a review and characterization of fish and invertebrates that occur in the near shore area and estuary including seasonal or migratory species and sensitive times and locations. • Reefs structure is expected to be colonized by biota offsetting smothering soft-sediment biota. • Minimize sediment release during construction to reduce affected area outside immediate reef-site area • Implement contingency plans if 	visual observation for oil spills	Construction activities related to reefs are yet to start. In construction of Inshore Berms, sediment release is bare minimum as the geotextile containers and bags are closed tightly after the sediments filled and compacted within.	PMU Contractor PMU Contractor

	fluids	spills of sediment, fuels Oil, or other fluids occur			
		Social, Economic and Cultural			
	Safety and human health Reduced safety of beach users	<ul style="list-style-type: none"> Public consultation to identify locations, times, and types of potential safety risks, and develop site-specific advisories and safety measures. All equipment, waste, and construction material debris must be inspected and removed daily from site. 	visual observation	Construction site completely barricaded with safety signs installed at critical locations. Materials and wastes are located at secure / designated locations	PMU Contractor
	Tourism: Beach amenity and recreational use disturbed	<ul style="list-style-type: none"> Public consultation to identify locations, times, and types of potential safety risks, and develop site-specific advisories and safety measures. All equipment, waste, and construction material debris must be inspected and removed daily from site. 			
	Fishing activity Disturb traditional fishing activity	<ul style="list-style-type: none"> Public consultation to identify locations, times, and types of potential conflict, , and develop site-specific measures to minimize disruption of boat launching and fishing activity 			
	Navigation Local navigation	<ul style="list-style-type: none"> Vessel movement and equipment operation to be carried out in consultation with stakeholders to avoid interference with navigation. 			

5. Approach and Methodology Engaged for Environmental Monitoring of the Project

The Tranche 1 sub project Monitoring has been divided into three heads viz., Measurement of Coastal data, Baseline Surveys and Environmental Monitoring and apart from this, visual site inspection also plays an important role in identifying impacts. The parameters under these heads are as follows:

A. Measurement of Coastal Data

- i. Waves (height, direction & time period)
- ii. Current measurements
- iii. Water levels

B. Baseline surveys

- iv. Bathymetry survey (Seabed level changes)
- v. Topo survey (Beach profiles, Crest levels)

C. Environmental Monitoring

- vi. Ambient Air Quality Monitoring
- vii. Marine Water Quality Monitoring
- vii. Noise Monitoring

The Environmental Monitoring parameters have been selected based on the EMP prepared during the Project Preparatory Technical Assistance (PPTA) stage and further parameters such as Measurement of Coastal Data and Baseline surveys have been added to ensure that the sub project performance.

Table 5.1: Tranche 1 Monitoring Programme

S.No	Description	Coverage area	Units	Frequency in Months
1	Measurement of Coastal Data			
	Wave	1	LS	Continues
	Tide monitoring	1	LS	Continues
	Current	1	LS	6
2	Baseline Surveys			
	Bathymetry survey	5.945	Sq km	6
	Topo survey	183200	Sqm	6
3	Environmental Monitoring			Once in a season expect monsoon
	Ambient Air Quality Monitoring			
	Marine Water Quality Monitoring			
	Noise Monitoring			

6. Monitoring of Environmental Receptors/ Attributes

During this reporting period various surveys has been conducted as part of the Tranche 1 monitoring programme as presented in Table 5.1. and found that the results obtained are well within the permissible limit for Environmental Parameters. The baseline data of waves, tides , current, beach profiles have been generated and are available at PMU.

The Environmental Monitoring was carried out during the October 2014 by OneEarth Enviro Labs which is and NABL accredited lab. The Environmental data collected during this reporting period is as shown in the Appendix C.

Based on the above Tranche 1 sub project monitoring heads, below table describes monitoring programme for various parameters, duration and frequency of monitoring

7. Details of Grievance Redress Committee and Complaints Received from Public and Action Taken Thereof to Resolve

Grievance redressal is being handled by PMU. However a formal Grievance Redressal Committee (GRC) is yet to be established for the implementation of tranche 1 sub project of SCPMIP to ensure that grievances are addressed in a timely manner, facilitating timely project implementation. Grievances of Affected Persons (APs) will first be brought to the attention of the Joint Director who is working full time at PMU. Grievances not redressed by the implementing agency will be brought to the Grievance Redressal Committee (GRC) of District Commissioner level.

The GRC will be chaired by the District Collector. GRC will determine the merit of each grievance, and resolve grievances within a month of receiving the complaint by the project affected people or the project implementing agency. If grievances are not addressed by the GRC of DC, further grievances will be referred by APs to the appropriate courts of law. Records will be kept of all grievances received including: contact details of complainant, date of the complaint received, nature of grievance, agreed corrective actions and the date of these were effected, and final outcome.

8. Follow –up Actions and Conclusion

PMDC-K has assessed the implementation of EMP during the reporting period, some areas such as safety arrangements and usage of personal protective equipment (PPE) by the construction workers require to be improved further. PMU has instructed the civil work Contractors to take appropriate mitigation actions to improve implementation of EMP, worker safety measures, dust control measures by carry out regular water sprinkling in dust prone areas and to ensure that all workmen and staff employed on site use safety gear provided to them. Correspondence has been made to contractors regarding safety maintenance, implementation of EMP etc. As in all three packages work is in progress, so it will be reviewed the following issue in approaching month.

- To obtain consent of Plants such as (Batching Plant) immediately.
- Submission of PUC certificates by all three contractors
- Use of personnel protective equipment of all workers.
- Safety at construction sites.
- Prevention of oil spillage at camp site and in sea
- Sanitation & housekeeping of camp.
- First Aid facility.

Appendices

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Appendix A. Location Map of Monitoring Station

Figure A.1: Location Map of Monitoring Station for Trance-1 Sub Project at Ullal



Appendix B. Site Photographs


Figure B.1: Inshore Berm Under Construction at Ullal Beach



Figure B.2: Ambient Air Quality Monitoring near Inshore Berm Site at Ullal Beach




Appendix C. Environmental Monitoring Data



OEL/A/F/08/05

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NABL Accredited as per ISO/IEC 17025:2005 ISO 9001 : 2008 CERTIFIED

NABL Accredited. Certificate No. T-2989 Report No: A/2014/0093
Validity 05.06.2014 to 04.06.2016 Report Date: 18/10/2014

AMBIENT AIR QUALITY ANALYSIS REPORT


Name	M/s Mott MacDonald Pvt Ltd		
Address	Near North Wharf Gate, Old Port Office Premises, Bunder, Mangalore-575001		
Sample Collected By	OneEarth Enviro Labs		
Sampling Location	1-Swimmers Association Building Terrace	Analysis Start Date	
Date of Sampling	13/10/2014 to 14/10/2014	15/10/2014	
Date of Sample Receipt	14/10/2014	Analysis End Date	
Sampling Details	Ambient Air Quality monitoring for 24 Hrs	15/10/2014	

Sl No	Date & Time	13/10/2014 To 14/10/2014	STD	Protocol	
		1420-1420			
		Location			
		Parameters	Result (µg/m³)		
1	PM2.5		3.08	60	USEPA QA Doc 2.12
2	PM10		26.87	100	IS 5182 : Part 23
3	SPM		9.39	500	IS 5182 : Part 4
4	SO ₂		BDL	80	IS 5182 : Part 2
5	NO ₂		BDL	80	IS 5182 : Part 6
6	*CO		BDL	4	Ref. HECS/A/151014001

BDL-Below Detection Limit ND-Not Detectable (...) -Detectable Limit BDL for SO₂ - 4 µg/m³ & NO₂ -9.4µg/m³
*Not Under NABL Scope


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2. The above result pertains only to the samples collected/received.
3. Samples will be destroyed after fifteen days from the date of issue of test reports unless otherwise specified, perishable samples are not retained.
4. Any dispute arising out of this test report is subjected to Mangalore Jurisdiction only.

Opinion	<p>As per Standards mentioned in the report.</p> <p>Report Status:- The sample meets the requirement as per relevant standard w.r.t above tested parameters, except for parameters above the Standards.</p>
---------	---



1 Floor, KSIA Building
Baikampady Industrial Area
MANGALORE - 575 011
Email: oneearthenviro@gmail.com

For OneEarth Enviro Labs



Authorised Signatory
(Murlidhar S M, Quality Manager)

Hubert Enviro Care Systems (P) Ltd.

18, 92nd Street, Ashok Nagar,
Chennai - 600 083.
Ph: 42985555 Fax: 42985500
E-mail : labsales@hecs.in

Inward No. 835
Recd by Carrier
on 20-10-14.

Laboratory Services Division

Accredited by NABL in the fields
of Chemical & Biological Testing.
Recognized by MoEF.
ISO 9001, 14001 & 18001 Certified.

TEST REPORT

Page 1 of 1

Report Date: 18/10/14

Report No: HECS/A/151014001

Name of the Client : M/s.One earth Enviro labs

Address of the Client : 1st floor,KSIA Building, Industrial Area Road
Baikambady: ,Mangalore.

Sample Description : Carbon Monoxide

Sample Drawn by : One Earth Enviro Labs

Received Date : 15/10/14

Analysis Commenced On: 15/10/14




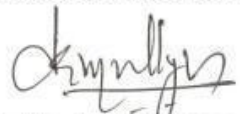
Sample Code:
A/2014/0093

Completed On: 18/10/14

S. No	Sampling Location	Unit	Results	Test Method
1	CO	mg/m ³	BDL (DL 0.1)	IS 5182 P 10 1999

Note: Below Detection Limit


Authorized signatory

		OEL/A/F/10/03								
1st Floor, KSIA Building, Industrial Area Road, Baikampady, Mangalore - 575 011 Ph: 0824-240 9011 Mob : +91 87625 39077 Email : oneearthenviro@gmail.com										
		Certificate No. T-2989								
NABL Accredited as per ISO/IEC 17025:2005		ISO 9001 : 2008 CERTIFIED								
<div style="display: flex; justify-content: space-between;"> <div> NABL Accredited. Certificate No. T-2989 Validity 05-06-2014 to 04.06.2016 </div> <div> Report No: N/2014/0127 Report Date: 16/10/2014 </div> </div>										
AMBIENT NOISE LEVEL MONITORING REPORT										
Name of the Industry		M/s Mott MacDonald Pvt Ltd								
Address		Near North Wharf Gate, Old Port Office Premises, Bunder, Mangalore-575001								
Sample Collected By		OneEarth Enviro Labs								
Sampling Location		L1- Swimmers Association Building Terrace								
Date of Sampling		13/10/2014								
Date of Sample Receipt		On site								
Sampling Details		Noise Level Monitoring Day time								
SL NO	Sample Location	Date	Duration	Parameters						KSPCB Limits
				Min	Max	Leq	L90	L50	L10	
1	L1	13/10/2014	1420-1425	41.8	53.4	49.7	--	--	--	75dB
Leq – Arithmetically mean value in a period of set time										
Note 1. The report shall not be reproduced except in full, without the written approval of the lab. 2. The above result pertains only to the samples collected/received. 3. Any dispute arising out of this test report is subjected to Mangalore Jurisdiction only. 4. Method Adopted IS:9989.1981										
Opinion		As per Standards mentioned in the report. Report Status:- The sample meets the requirement as per relevant standard w.r.t above tested parameters, except for parameters above the Standards.								
				For OneEarth Enviro Labs  Authorised Signatory (Murlidhar S M, Quality Manager)						
Page 1 of 1										