# BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW DELHI M.A. NO. 1302/2018

IN

#### ORIGINAL APPLICATION NO. 804/2017

IN THE MATTER OF:-

RAJIV NARAYAN & ANR.

VERSUS

APPLICANT

UNION OF INDIA & ORS.

RESPONDENTS

#### INDEX

SL. NO.	PARTICULARS	PAGE NO.
01.	FINAL REPORT OF MONITORING COMMITTEE ON MANAGEMENT OF HAZARDOUS WASTE IN THE MATTER OF O. A. NO. 804/2017 AND M. A. NO.	
02.	1302/2018.  ANNEXURE-1 HON'BLE SUPREME COURT ORDERS DATED 14/10/2003 IN WP(C) NO. 657/1995.	
03.	ANNEXURE-2 HON'BLE SUPREME COURT JUDGEMENT DATED 06/07/2012.	113
04.	ANNEXURE-3. HON'BLE NGT ORDERS DATED 30/07/2018 IN OA NO. 804/2018.	
05.	ANNEXURE-4 HON'BLE NGT ORDERS DATED 05/12/2018.	
06.	ANNEXURE-5 HON'BLE NGT ORDERS DATED 12/04/2019.	
07.	ANNEXURE-6 OFFICE ORDER DATED 09/08/2018 FOR CONSTITUTION OF THE MONITORING COMMITTEE.	
08.	ANNEXURE-7 OFFICE ORDER DATED 13/08/2018 FOR APPOINTMENT OF NODAL OFFICER OF THE MONITORING COMMITTEE.	
09.	ANNEXURE-8 OFFICE ORDER DATED 14/12/2018 FOR EXTENSION OF TENURE OF THE MONITORING COMMITTEE.	
10.	ANNEXURE-9 OFFICE ORDER DATED 14/12/2018 FOR REVISED TERMS OF REFERENCE FOR THE MONITORING COMMITTEE.	
11.	ANNEXURE-10 OFFICE ORDER DATED 01/07/2019 FOR APPOINTMENT OF SH. ABHEY SINGH SONI AS NODAL OFFICER OF THE MONITORING COMMITTEE.	
12.	ANNEXURE-11 COPY OF SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS OF THE INTERIM REPORT OF THE MONITORING COMMITTEE.	
13.	ANNEXURE-12 CPCB LETTER DATED 08.03.2019 ISSUED TO DEPARTMENT OF ENVIRONMENT, INDUSTRIES, LABOUR OF 35 STATES/UTS.	
14.	ANNEXURE-13 CPCB LETTER DATED 24.04.2019 ISSUED TO CHIEF SECRETARY/ ADVISOR TO THE ADMINISTRATOR OF 35 STATES/UTS.	
15.	ANNEXURE-14 VISIT REPORT OF CONTAMINATED SITE AT RANIA, KANPUR.	



16.	ANNEXURE-15 VISIT REPORT OF CONTAMINATED SITE AT LOHIA NAGAR, GHAZIABAD.	King
17.	ANNEXURE-16 VISIT REPORT OF ICDS LOCATED IN TUGHLAKHABAD, DELHI.	
18.	ANNEXURE-17 VISIT TO VISAKHAPATNAM AND KAKINADA, ANDHRA PRADESH.	
19.	ANNEXURE-18 QUESTIONNAIRES FORWARDED TO CBIC, MINISTRY OF SHIPPING, ICDS/CFSS, , PORT AUTHORITY.	
20.	ANNEXURE-19 LIST OF 55 CONTAMINATED SITES FOR WHICH DETAILED ASSESSMENT/ DPR PREPARATIONS/REMEDIATION WORKS ARE UNDER PROGRESS.	
21.	ANNEXURE-20 LIST OF 134 CONTAMINATED SITES OUT OF 329 WHICH HAVE BEEN SELECTED FOR PRELIMINARY/DETAILED ASSESSMENT/REMEDIATION.	
22.	ANNEXURE-21 LIST OF 195 PROBABLE CONTAMINATED SITES.	
23.	ANNEXURE-22 RECOMMENDATIONS OF FORMER ASG IN THE REPORT TITLED "SUGGESTED MODALITIES TO DEAL WITH ILLEGAL IMPORTED CONSIGNMENTS AND SUGGESTED AMENDMENTS IN REGULATIONS/POLICIES".	
24.	ANNEXURE-23 STATUS OF THE UNCLAIMED/UNCLEARED GOODS LYING IN VARIOUS ICDS/CFSS BY CBIC	
25.	ANNEXURE-24 CBIC CIRCULAR DATED 26.04.2004 FOR DISPOSAL OF CONFISCATED ITEMS.	
26.	ANNEXURE-25 DETAILS OF THE LABORATORY FACILITIES AVAILABLE FOR ANALYSIS OF HAZARDOUS MATERIALS IN CUSTOMS.	
27.	ANNEXURE-26 LIST OF OILS SUGGESTED FOR PRE-SHIPMENT INSPECTION CERTIFICATE FOR IMPORTS IN THE RECOMMENDATIONS OF THE REPORT OF THE FORMER ASG, SH GOPAL SUBRAMANIAM.	
28.	ANNEXURE-27 RELEVANT PROVISIONS OF CHAPTER VI OF MERCHANT SHIPPING (PREVENTION OF POLLUTION BY OIL FROM SHIPS) RULES, 2010.	
29.	ANNEXURE-28 RELEVANT PROVISIONS OF CHAPTER VIII OF MERCHANT SHIPPING (PREVENTION OF POLLUTION BY NOXIOUS LIQUID SUBSTANCES IN BULK) RULES, 2010.	
30.	ANNEXURE-29 RELEVANT PROVISIONS OF CLAUSE 12 OF MERCHANT SHIPPING (PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS) RULES, 2010.	
31.	ANNEXURE-30 RELEVANT PROVISIONS OF CLAUSE 7 OF MERCHANT SHIPPING (PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS) RULES, 2010.	
32.	ANNEXURE-31 RELEVANT PROVISIONS OF ENGINEERING CIRCULAR 1 OF 2012 (RATIFICATION AND ENFORCEMENT OF ANNEX XI OF MARPOL 73/78 OF PREVENTION OF AIR POLLUTION FROM SHIPS).	
33.	ANNEXURE-32 COMPREHENSIVE LIST OF OPERATIONAL NON-MAJOR PORTS IN INDIA PUBLISHED UNDER BASIC PORT STATISTICS (2017-18).	



34.	ANNEXURE-33 ASSESSMENT REPORT FOR ADEQUACY OF WASTE
	RECEPTION FACILITIES CONDUCTED BY DG SHIPPING.
35.	ANNEXURE-34 STANDARD OPERATING PROCEDURE FOR ASSESSMENT OF ADEQUACY OF A PORT RECEPTION FACILITY VIDE CIRCULAR DATED 06.03.2018 ISSUED BY DG SHIPPING.
36.	ANNEXURE-35 HON'BLE SUPREME COURT ORDERS DATED 23.09.2003 TO  CONSTITUTE A SPECIAL COMMITTEE W.R.T IMPACT OF HW ON WORKERS'  HEALTH.
37.	ANNEXURE-36 RECOMMENDATIONS OF THE SPECIAL COMMITTEE REPORT ON ".
38.	ANNEXURE-37 QUESTIONNAIRE SENT BY MONITORING COMMITTEE VIDE  LETTER DATED 31.08.2018 TO SEEK INFORMATION FROM DEPARTMENT OF  LABOUR.
39.	ANNEXURE-38 CPCB LETTER DATED 08.03.2019 ISSUED TO DEPARTMENT OF LABOUR OF 35 STATES/UTS.
40.	ANNEXURE-39 CPCB LETTERS DATED 27.05.2019 ISSUED TO 35 STATES/UTS DEPT. OF LABOUR, ENVIRONMENT & INDUSTRIES.
41.	ANNEXURE-40 CPCB LETTER DATED 28.03.2019 ISSUED TO ALL SPCBS/PCCS AND RDS OF CPCB TO SEND COMPLIANCE STATUS ON DISPLAY BOARD.

(ABHEY SINGH SONI)
ADDITIONAL DIRECTOR
CENTRAL POLLUTION CONTROL BOARD,
PARIVESH BHAWAN, EAST ARJUN NAGAR,
DELHI-110032.

DATE: 23.07.2019 PLACE: DELHI

# Final Report of Monitoring Committee on Management of Hazardous Waste

(in the matter of O. A. No. 804/2017 and M. A. No. 1302/2018)



July, 2019

CENTRAL POLLUTION CONTROL BOARD

Ministry of Environment, Forest and Climate Change Govt. of India

### Contents

1.	INTR	RODUCTION8
1.	.1.	Orders of Hon'ble Supreme Court
1.	.2.	ORDERS OF HON'BLE National Green Tribunal9
1.	.3.	Constitution of Monitoring Committee
1.	.4.	Regulatory Framework
1.	.5.	Scope of the Report
		ROACH/METHODOLOGY ADOPTED BY THE MONITORING
2.	.1.	Meeting/Discussions with stakeholders
2.	.2.	Field Visits
3.	CON'	TAMINATED SITES AND RELATED ISSUES19
3.	.1.	Observations of MOnitoring committee Error! Bookmark not defined.
3.	.2.	Recommendations of monitoring committee Error! Bookmark not
d	efine	d.
4.	IMPC	ORT AND EXPORT OF HAZARDOUS WASTE AND ISSUES 24
4.	.1.	Background24
4.	.2.	Excerpts of issues in the Recommendations of the ASG Report 25
4.	.3.	Procedure for Import-Export of Hazardous Waste
	.4. ioven	Regulatory Framework for import and export (Transboundary nent) of hazardous waste
	A. Tra	Provisions under the Hazardous and Other Wastes (Management and ansboundary Movement) Rules, 2016
	В.	Provisions under The Foreign Trade (Regulation) Rules, 1993 27
	C.	Provisions under The Customs Act, 1962
4.	.5.	Status of compliance on the Recommendations of the ASG Report 31
4.	.6.	Visit of Monitoring Committee to Customs House and ICDs 32
4.	.7.	Audit Report on Performance and working of ICDs and CFSs 32
4.	.8.	Observations and Recommendations
		TE RECEPTION FACILITIES FOR WASTES generated FROM SHIPS ISSUES
	.1.	Background42
5.	.2.	Excerpts of Issues related to the Hon'ble Supreme Court matter 44
5.	.3.	Policies and Regulations
5.	.4.	MARPOL Convention
5.	.5.	Requirements of Port Reception Facility for Oil Wastes from ships: 48
	.6.	Status of compliance of the orders of the Hon'ble Supreme Court 50
	.7.	Observations of the Monitoring Committee
	.8.	RECOMMENDATIONS
		ACT OF HAZARDOUS WASTE ON WORKERS HEALTH 55
		Background

6.2.	Excerpts of Recommendations of the Report of the Special Committee: 57
	Status of compliance of Orders of Hon 'ble Supreme Court in the matter A. No. 1302/2018 in Interlocutory Application No. 63 in W.P. (C) No. 1995
6.4.	Status of compliance of Rule 5(2) of HOWM Rules, 2016: 59
6.5.	national policy for safety health and environment for workers, 200961
6.6.	OBSERVATIONS:
6.7.	RECOMMENDATIONS of the monitoring committee: 64
	TUS ON COMPLIANCE ON CERTAIN ISSUES WITH REGARD TO
	1'BLE SUPREME COURT ORDERS DATED 14.10.2003
7.1.	Institutional Framework
	1. Recommendations
7.2. w.r.t o	STATUS OF COMPLIANCE OF ORDERS of the HON'ble Supreme court lisplay board
	1. Observation
7.2.	2. Recommendations: 82
7.3.	NATIONAL POLICY83
8. SUM	IMARY OF OBSERVATIONS AND RECOMMENDATIONS85
	LIST OF FIGURES
_	: Interactive meet with Stakeholders (CBIC, DG(S), DGFT & DGFASLI) on 3rd April, 2019
M.A. N	2: Interaction with Sh. Sanjay Parikh, Learned Counsel in the matter of o. 1302/2018 in Interlocutory Application No. 63 in W.P. (C) No. 95 on January 08, 2019
Figure 3	3: Meeting of Monitoring Committee held during 08-09th July, 2019 17
Figure 4	Example: Display board with updated information
Figure 5	5: Display board installed with no updated information
	LIST OF TABLES
	Observations and Recommendations on Import and Export of Hazardous
Table 2:	PROVISIONS FOR WORKERS HEALTH AND SAFETY UNDER VARIOUS ES OF LABOUR ACTS AND RULES
Table 3:	State wise compliance received from SPCBs/PCCs
	State wise compliance details of units provided by Regional Directorates during routine monitoring (April-June, 2019)

#### LIST OF ANNEXURES

S.NO.	Title	Page no.
Annexure 1	Hon'ble Supreme Court orders dated 14/10/2003 in WP(C) NO. 657/1995	
Annexure 2	Hon'ble Supreme Court Judgement dated 06/07/2012	
Annexure 3	Hon'ble NGT orders dated 30/07/2018 in OA No. 804/2018	
Annexure 4	Hon'ble NGT orders dated 05/12/2018	
Annexure 5	Hon'ble NGT orders dated 12/04/2019	
Annexure 6	Office Order dated 09/08/2018 for constitution of the Monitoring Committee	
Annexure 7	Office Order dated 13/08/2018 for appointment of Nodal officer of the Monitoring Committee	
Annexure 8	Office Order dated 14/12/2018 for extension of tenure of the Monitoring Committee	
Annexure 9	Office Order dated 14/12/2018 for revised Terms of Reference for the Monitoring Committee	
Annexure 10	Office Order dated 01/07/2019 for appointment of Sh. Abhey Singh Soni as Nodal Officer of the Monitoring Committee	
Annexure 11	Copy of Summary of Observations and Recommendations of the Interim Report of the Monitoring Committee	
Annexure 12	CPCB letter dated 08.03.2019 issued to Department of Environment, Industries, Labour of 35 States/UTs	
Annexure 13	CPCB letter dated 24.04.2019 issued to Chief secretary/ Advisor to the Administrator of 35 States/UTs	
Annexure 14	Visit report of Contaminated site at Rania, Kanpur	
Annexure 15	Visit report of Contaminated site at Lohia Nagar, Ghaziabad	
Annexure 16	Visit report of ICDs located in Tughlakhabad, Delhi	
Annexure 17	Visit to Visakhapatnam and Kakinada, Andhra Pradesh	
Annexure 18	Questionnaires forwarded to CBIC, Ministry of Shipping, ICDs/CFSs, , Port Authority	
Annexure 19	List of 55 Contaminated sites for which detailed assessment/ DPR preparations/Remediation works are under progress	
Annexure 20	List of 134 Contaminated sites out of 329 which have been selected for preliminary/detailed assessment/remediation	
Annexure 21	List of 195 Probable Contaminated Sites	
Annexure 22	Recommendations of former ASG in the Report titled	

	"Suggested modalities to deal with illegal imported consignments and suggested amendments in Regulations/policies"	
Annexure 23	Status of the unclaimed/uncleared goods lying in various ICDs/CFSs by CBIC	
Annexure 24	CBIC circular dated 26.04.2004 for disposal of confiscated items	
Annexure 25	Details of the laboratory facilities available for analysis of hazardous materials in Customs	
Annexure 26	List of oils suggested for pre-shipment inspection certificate for imports in the Recommendations of the Report of the former ASG, Sh Gopal Subramaniam	
Annexure 27	Relevant provisions of Chapter VI of Merchant Shipping (Prevention of Pollution by Oil from Ships) Rules, 2010	
Annexure 28	Relevant provisions of Chapter VIII of Merchant Shipping (Prevention of Pollution by Noxious Liquid Substances in Bulk) Rules, 2010	
Annexure 29	Relevant provisions of Clause 12 of Merchant Shipping (Prevention of Pollution by Sewage from Ships) Rules, 2010	
Annexure 30	Relevant provisions of Clause 7 of Merchant Shipping (Prevention of Pollution by Garbage from Ships) Rules, 2010	
Annexure 31	Relevant provisions of Engineering Circular 1 of 2012 (Ratification and Enforcement of Annex XI of MARPOL 73/78 of Prevention of Air Pollution from Ships)	
Annexure 32	Comprehensive List of operational non-major ports in India published under Basic Port Statistics (2017-18)	
Annexure 33	Assessment Report for adequacy of waste reception Facilities conducted by DG Shipping	
Annexure 34	Standard Operating Procedure for Assessment of Adequacy of a Port Reception facility vide circular dated 06.03.2018 issued by DG Shipping	
Annexure 35	Hon'ble Supreme court orders dated 23.09.2003 to constitute a Special Committee w.r.t Impact of HW on workers' health	
Annexure 36	Recommendations of the Special Committee Report on "	
Annexure 37	Questionnaire sent by Monitoring Committee vide letter dated 31.08.2018 to seek information from Department of Labour	
Annexure 38	CPCB letter dated 08.03.2019 issued to Department of Labour of 35 States/UTs	
Annexure 39	CPCB letters dated 27.05.2019 issued to 35 States/UTs Dept. of Labour, Environment & Industries	

	CPCB letter dated 28.03.2019 issued to all SPCBs/PCCs	
Annexure 40	and RDs of CPCB to send compliance status on Display	
	Board	

#### **ABBREVIATIONS**

MoEF&CC Ministry of Environment, Forest & Climate Change

CPCB Central Pollution Control Board

SPCB/PCC State Pollution Control Board/Pollution Control

Committee

HOWM Rules, Hazardous and Other Waste (Management, Handling

2016 and Transboundary Movement)Rules, 2016

SC Supreme Court

SCMC Supreme Court Monitoring Committee

NEP, 2006 National Environment Policy, 2006

HW Hazardous Waste

CBIC Central Board of Indirect Taxes and Customs

CFS Container Freight Stations

ICDs Inland Container Depots

DG (S) Director General Shipping

DGFT Directorate General of Foreign Trade

DGFASLI Directorate General, Factory Advice and Labour

Institutes

ESIC Employees' State Insurance Corporation

CT Clean Technology

#### 3. CONTAMINATED SITES AND RELATED ISSUES

The Applicant has raised serious concern over the delay in remediation of contaminated sites in the country. During the discussions with applicant, he has submitted that though many sites have been identified by MoEF&CC as probable contaminated sites, there could be many more such contaminated sites which have not been listed so far. Applicant further sited the instances wherein Hon'ble NGT has directed remediation of groundwater, which was contaminated due to industrial discharges and even imposed environmental compensation cost.

In this context, the Monitoring Committee referred to the directions of the Hon'ble apex court in the matter of W. P. (C) No. 657/1995 dated 14.10.2003 and noted that the SPCBs/PCCs were given three months for preparation of inventories regarding waste dump sites and rehabilitation plan. Thereafter, CPCB was required to cross check and also evaluate the rehabilitation plan in four months. Subsequently, SPCBs/PCCs were required to fix the time frame for implementation of the rehabilitation plan within 03 months. The Hon'ble apex court in its judgment dated 06.07.2012 has further dealt the issue and referred to the contamination of environment ecology and fragile marine bio diversity due to dumping of hazardous waste.

In compliance with the Hon'ble apex court orders, CPCB had prepared a list of 141 hazardous waste dump sites based on the information received from the SPCBs/PCCs. After the rehabilitation of hazardous waste dumped at such sites the number of dump sites was reported to be reduced to 69 across 10 states by year 2010-11.

Later on, in 2012, MoEF&CC engaged an expert consultant under "Capacity Building for Industrial Pollution Management Project (CBIPM Project)", to identify probable contaminated sites for preparation of inventory. This task was supported by another assignment under the same project wherein "Guidance document for assessment and remediation of contaminated sites in India" was developed. Based on these guidelines, 320 probable contaminated sites were identified in year 2014-15. In addition to these 320 probable contaminated sites, SPCBs informed about 09 additional sites thereby making total probable contaminated sites to 329. Further, out of the 320 probable contaminated sites, 100 sites were selected for preliminary assessments based on the following criteria:

- ✓ Sites with the expected highest risk to humans and the environment
- ✓ High priority sites according to request from MoEF&CC, CPCB, SPCBs/PCCs and other stakeholders
- ✓ Source of industry
- ✓ Types of contamination
- ✓ Type of activity
- ✓ Type of land use
- ✓ Types of contaminants
- ✓ Size of site (area)
- ✓ Geographical distribution

Accordingly, 08 sites out of 100 were considered not necessary for further detailed assessment, while as many as 92 sites were considered as contaminated and needed further detailed investigation.

As informed by CPCB, out of aforesaid 92 contaminated sites, 21 sites have been selected for detailed assessment and Preparation of DPRs for remediation under following projects/studies:

- ✓ NCEF Project 16 sites
- ✓ CBIPM Project 2 sites
- ✓ Others Studies 3 sites

The current status of DPRs for aforesaid 21 sites is reported to be as follows:

- ✓ NCEF Project 13 completed and remaining will be completed by November, 2019.
- ✓ CBIPM Project 2 completed
- ✓ Others studies 3 completed

CPCB has informed that DPRs prepared under NCEF project have been forwarded to the respective State Govt. and SPCBs for necessary execution of remediation works. Further studies were not continued since, NCEF project has been discontinued by Govt. of India.

CPCB further informed that in addition to aforesaid 100 sites, detailed assessments were carried out in 34 more sites under CBIPM Project, NCEF Project and Other studies. Total 55 contaminated sites, wherein detailed assessment/ DPR preparations/remediation works are under progress. List of these 55 contaminated sites is appended at **Annexure-19**.

Therefore, total 134 contaminated sites out of 329 have been selected for preliminary/detailed assessment/remediation. List of these contaminated sites is appended at **Annexure-20**.

CPCB further informed that they are in the process of preparing guidelines for identification and assessment of the contaminated sites based on "Guidance Document for Assessment and Remediation of Contaminated Sites in India" published by MoEF&CC in the year 2017, which is available on MoEF&CC website. MoEF&CC has already prescribed screening criteria for such probable contaminated sites in the aforesaid guidance document. Based on such guidance document, CPCB intends to prepare and publish a concise guideline for identification and assessment of contaminated sites in India within next 03 months. Such document shall be used by the SPCBs/PCCs to carry out uniform, consistent and scientific approach for identification and assessment of identified contaminated sites as well as any new additional probable contaminated sites.

The present approach of remediation is based on environmental, ecological and human health risks associated with contaminants, site specific conditions and envisaged end use of the remediated site, which determines the target level of remediation. Remediation technique will be site as well as contaminant specific.

The actual remediation work on the sites for which DPRs are already available, is unfortunately getting unduly delayed due to one or another reasons including the financial arrangements. As per DPRs prepared

under NCEF Project, estimated cost of remediation for 17 contaminated sites is about Rs. 900 crore. There are certain proposals with Central as well as State Govt. to support these programs on priority basis. However, Committee was informed that no specific time frame has been fixed for such remediation projects.

#### 3.1. OBSERVATIONS

- (i) The contaminated site is a complex and multi faceted problem and therefore scientific remediation essentially needs site specific and contaminant specific approach. The Committee has observed that there is a need of awareness and capacity building in SPCBs/PCCs on the entire remediation process including identification, detailed assessment, DPR preparation, and execution of remediation. In this regard, Committee notes that CPCB is already working on the development of guidelines for uniform identification and assessment of probable contaminated sites. Such guidelines will bring consistency and uniformity in dealing with the contaminated sites issues across the country.
- (ii) The Committee notes with regret that even today, there are 195 probable contaminated sites (329-134), needing a thorough assessment for its confirmation as contaminated site or otherwise. Such a delay will not only cause continual environmental pollution but also might result into encouraging the respective polluters to continue with their activities without facing Rule of the Law. List of these probable contaminated sites is appended as **Annexure-21**.
- (iii) The Committee notes that although the DPRs of 17 sites out of 21 are completed under NCEF Project and the same have been forwarded to respective State Govt. and SPCBs; however, no remediation efforts have been initiated at such sites. Even preliminary remedial measures such as lifting of hazardous waste dumped at such sites to prevent further ingress of hazardous waste contamination have not been taken. In fact, this is the first regulatory intervention that is required to be taken at state level that should have been prioritized.
- (iv) The Committee notes from the discussion with CPCB and SPCBs that there are certain issues and concerns related to financing of such remediation projects. The Committee while taking note of public trust doctrine read with provisions of section 9 of Environment (Protection) Act, 1986, opines that it is the duty of the Government, both Central and State, to protect environment by taking remedial measures irrespective of the arrangements which seems to be a matter of ongoing deliberations. Therefore, the Committee is of the strong opinion SPCBs/PCCs, irrespective of financial constraints, should take up on priority not only remediation projects at the sites where DPRs have been prepared but also the assessment of 195 sites, as mentioned earlier, besides any new addition of potentially contaminated site, if any.
- (v) The Committee notes that entire exercise of identification, assessment and remediation of contaminated site is technically a very complex subject; even execution of remediation projects would require necessary inter-disciplinary expertise at the SPCBs/PCCs. The CPCB/SPCBs/PCCs may find difficulty to work on these

aspects unilaterally and there has to be certain level of coordination and information sharing among these agencies, preferably coordinated by CPCB, besides developing a capacity building network of academic and research institutes which can help in creating an "Expertise Pool". The Committee notes that, as a part of such capacity building efforts, specific action research programs can be initiated by these agencies and more particularly professional courses on remediation and restoration can be sponsored at academic/research institutions, which will help to create a critical mass of expertise in this subject.

#### 3.2. RECOMMENDATIONS

1. CPCB/SPCBs/PCCs to ensure that the hazardous waste accumulated at all such identified sites shall be disposed of either through Treatment, Storage and Disposal facilities (TSDFs) or onsite secured landfilling on priority to stop further contamination.

Agency Responsible: SPCBs/PCCs/CPCB (06 months)

2. CPCB/SPCB/PCCs shall ensure that there is no further ingress and dumping of hazardous waste at the identified probable and confirmed contaminated sites. There should be at least quarterly inspections to verify the same. If site is located at industrial area, the site shall be protected by concerned Industrial Development Corporation, and by the concerned District Administration, if the site is not in industrial area.

Agency Responsible: Industrial Development Corporation / District Administration (03 months)

3. The Committee recommends that issues related to financial arrangements for the proposed remediation projects shall be resolved immediately so that the remediation works as proposed in DPRs can be undertaken on priority. There should not be any further delay as Central and State Govt. are required to ensure environmental protection in view of public trust doctrine and also section 9 of the Environment (Protection) Act, 1986. Committee also notes that DPRs are of 2017-18 and 2018-19 and if no action is taken in a reasonable time for execution of remediation works, these DPRs may need revision/updating. A compliance report shall be submitted to Hon'ble Tribunal.

Agency Responsible: MoEF&CC/State Govt. (06 months)

4. The Committee recommends that in order to ensure effective implementation of the remediation plan at State Level, Empowered Monitoring Committee, chaired by Principal Secretary, Department of Environment, concerned State Govt. having representatives from department of Industries, SPCB/PCC, Groundwater Development Agency, etc. shall be constituted.

Agency Responsible: State Govt. (04 months)

5. CPCB shall publish the guidelines for identification and assessment of contaminated sites, which shall be used for consistent and uniform application across the county.

Agency Responsible: CPCB (03 months)

6. The Committee recommends that the assessment of remaining probable 195 sites and new additional potentially contaminated

sites, if any, recommended by CPCB/SPCBs/PCCs, shall be completed within a period of 1 year after publication of such guidelines.

Agency Responsible: CPCB/SPCBs/PCCs (01 year)

7. The Committee also is of the opinion that there needs to be an annual status report for all such potential and confirmed contaminated sites which can be prepared by SPCBs/PCCs, and submitted to CPCB. CPCB can verify the information, as may be required, and publish the same as "Annual Inventory of contaminated sites in India". The necessary format, timelines etc. can be circulated by CPCB.

Agency Responsible: CPCB (01 month) SPCBs/PCCs (06 months)

8. There is a need of capacity building in the field of remediation and MoEF&CC/CPCB/SPCBs/PCCs shall undertake action research and also promote academic courses on this subject in association with academic and research institutions. There needs to be annual budget for such purpose and possibilities of recovering the amount from the HW generating industries, as per order dated 14.10.2003, can be examined.

Agency Responsible: MoEF&CC/CPCB/ SPCBs/PCCs (06 months)

#### 8. SUMMARY OF OBSERVATIONS AND RECOMMENDATIONS

The Monitoring Committee has reviewed various aspects of orders of Hon'ble Supreme Court with regard to effective compliance of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and related issues. The summary of observations along with proposed actions to be taken by responsible agency and timeline has been tabulated below for consideration of Hon'ble Tribunal to issue suitable directions, if necessary.

Sr.No.	Observations	Proposed Actions (Responsible Agency and timeline of action)
	I. CONTAMINATED SIT	ES AND RELATED ISSUES
1.	Disposal of hazardous wastes accumulated at identified sites:  (i) The Committee has observed that there are several contaminated dumpsites in various parts of country where hazardous and other wastes were dumped historically, which resulted in contamination of soil, groundwater and surface water thereby posing health and environmental risks.	(i) CPCB/SPCBs/PCCs to ensure that the hazardous waste accumulated at all such identified sites shall be disposed of either through Treatment, Storage and Disposal Facilities (TSDFs) or on-site secured landfilling (SLF) on priority to stop further contamination  (CPCB/SPCBs/PCCs: 06 months)
2.	Guidelines for Identification and Assessment of Contaminated Sites:  (i) The Committee notes that CPCB is working on standard uniform identification and assessment guidelines for the probable contaminated sites and any new additional sites, such guidelines will bring a consistency and uniformity in dealing with the contaminated sites issues.	(i) For a consistent and uniform application and approach across the country, guidelines for identification and assessment of contaminated sites shall be published.  (CPCB: 03 months)
3.	Assessment and remediation of Contaminated sites:  (i) The Committee has observed that there is a need of awareness and	(i) Capacity building program for officials of SPCBs/PCCs on the entire process of remediation, which may include practical training on use of tools for soil and groundwater screening

- capacity building in SPCBs/PCCs on the entire remediation including process detailed identification, **DPR** assessment, preparation and execution of remediation.
- (ii) Further, the committee notes with regret that even today there are about 195 probable contaminated sites (329-134) which needs thorough assessment for confirmation as contaminated site or otherwise. Though the DPRs of 17 sites out of 21 are prepared under NCEF Project and the same have been forwarded to respective State Governments and State Boards. However, no remediation efforts have been initiated at such sites.

such as hand-held XRF instruments, Colorimeter, PID for VOCs/ SVOCs, hand operated augers, groundwater pumps, level meters, etc. shall be organized by CPCB.

#### (CPCB: 06 months)

(ii) Assessment of about 195 probable contaminated sites and any new additional sites recommended by CPCB/SPCBs/PCCs be shall completed within period of 1 year after publication of such guidance document by CPCB.

#### (CPCB/SPCBs/PCCs: 1 year)

(III) For effective implementation of the remediation plan at State Empowered Monitoring Committee chaired by Principal Secretary, Department of Environment having representatives from department of Industries. SPCB/PCC, Ground water development agency, etc. shall be constituted.

#### (State Govt: 04 months)

- 4. Financial Arrangements for remediation of contaminated sites:
  - (i) The Committee while taking note of public trust doctrine read with provisions of section 9 of E (P) Act, it is the duty of the Govt. both Central State to protect environment by taking remedial measures irrespective of the financial arrangements which seems to be a matter of ongoing deliberations.
- (i) Financial arrangements between Central-State Governments for the proposed remediation projects shall be resolved immediately so that the remediation works as proposed in DPRs can be undertaken on priority. These DPRs (2017-18 and 2018-19) may need to be revisited if no action is taken in a reasonable time for execution of remediation works.
- (ii) Govt. should take up on priority not only remediation projects at the sites where DPRs have been prepared but also the assessment of about 195 sites, besides any new addition of potentially contaminated site, if any.

(MoEF&CC/State Govt.: 06 months)

## 5. Networking of Academic and Research Institutes:

- (i) Execution of remediation program would require necessary interdisciplinary expertise at the SPCBs/PCCs. The CPCB/SPCBs/PCCs may find it difficult to work on these aspects unilaterally and therefore there has to be coordination and information sharing among these agencies developing beside network of academic and research institutes which help can in "Expertise creating an Pool".
- (ii) The committee also notes that a part of such capacity building efforts specific action research programs can he initiated by these agencies and more particularly professional courses on remediation and restoration can be sponsored academic/research which institution will help to create a critical mass of expertise in this subject.

(i) MoEF&CC/CPCB/SPCBs/PCCs shall undertake action research and also promote academic courses on this subject in association with academic and research institutions.

(MoEF&CC/CPCB/ SPCBs/PCCs: 06 months)

#### II. IMPORT AND EXPORT OF HAZARDOUS WASTES AND ISSUES

# 5. Disposal of illegally imported consignments:

- (i) In case of confiscated items, responsibility to dispose lies with Customs. **CBIC** vide No.31/2004-Circular dated 26-4-2004 Cus, referred to has the orders of the Hon'ble Supreme Court in the matter of WP(C)657/1995 for disposal of
- (i) The customs circular dated 26-4-2004 requires amendment by Central Board of Indirect Taxes and Customs (CBIC) and it is recommended that CBIC to also devise policy framework for speedy disposal and bearing the cost of disposal of confiscated consignments (illegal / banned and non-conformity to the specifications of the products as applicable / as per Schedule V of HOWM Rules, 2016).

Sr. No.	Site o	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
			Andl	Andhra Pradesh (01 site)	
H	Kadapa Dump site, Kadapa, Andhra Pradesh	14.285196	78,50386	Lead, Zinc and other heavy metals	Under CBIPMP, Closure & containment works is under progress.
				Gujarat (01 site)	
2	Effluent Channel Project Limited (ECPL) (Baroda Effluent Canal) Vadodara and Bharuch District	22.342609	73.151402	Volatile Organic Compound	Remediation works initiated by group of industries
Į.				Kerala (04 sites)	
w	Kuzhikandom Thodu, Kerala	10.079547	76.294582	DDT, Endosulfan, Dicofol, Ammonium Phosphate and Ammonium Sulfate, Thorium oxalate, Rare-earth fluoride and Rare-earth chloride, Thiozoles, Sulphamides and antioxidants.	DPR prepared for execution of actual remediation works under NCEF project.
4.	Ammanthuruthu- Karipadam	10.083385	76.288432	DDT, Endosulfan, Dicofol, Ammonium Phosphate and Ammonium Suffate, Thorlum oxalate, Rare-earth fluoride and Rare-earth chloride, Thiozoles, Sulphamides and antioxidants.	DPR prepared for execution of actual remediation works under NCEF project.
ţi.n	Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc Ltd.)			Zinc and its compounds	DPR prepared for execution of actual remediation works under NCEF project.
5.	Edayar, Chakkarachal Kochi, Kerala (in & around the premises of M/s. Binani Zinc Ltd.)			Zinc and its compounds	DPR prepared for execution of actual remediation works under NCEF project.

Sr. No.	Site o	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
			Madh	Madhya Pradesh (04 sites)	
7,	Sajjan Chemicals (now Kataria wires Ltd)-Plot No ; 54 E Dosigoan Industrial area, Ratiam, Madhya Pradeh	23.357857	75.045467	Fead	DPR preparation is ongoing under NCEF project
00	Sajjan chemical Pvt.Ltd (Plot No -61 B, Dosigaon Industrial Area, Ratlam)	23,360211	75.047161	Lead	DPR preparation is ongoing under NCEF project
ō	Sajjan chemical Pvt Ltd (Khandarwesa Mines, Near Nimall Village)	23.487821	75.065871	Lead	DPR preparation is ongoing under NCEF project
10.	M/s Jayant Vitamin, Ratlam- 457001	23,330447	75,043353	Sulphate, Chlorides, Aluminium, Iron	DPR preparation is ongoing under NCEF project
			Ma	Maharashtra (01 site)	
11.	M/s Godavari Bio-Refineries, Ahmed Nagar District, Maharashtra	19.8233337	74,56901795	Colour and COD, SO <sub>4</sub> , Chlorides and volatile fatty acids	Remediation works initiated by group of industries
			£	Orissa (05 sites)	
12.	ORICHEM abandoned site, Talcher, Orissa-	20.925735	85.17287	Chramium VI	DPR prepared for execution of actual remediation works under NCEF project.
13.	Site NALCO-II,M/s National Aluminum Co. Products, Angul	20.821955	85.158576	Fluoride, Cyanide	Probable Contaminated Site
14	Dumpsite JCL-I, Jayashree Chemicals, Ganjam	19.378006	85.051354	Mercury	DPR prepared for execution of actual remediation works under NCEF project.
15	Dumpsite JCL-II Jayashree Chemicals, Ganjam	19.381236	85.052652	Mercury	DPR prepared for execution of actual remediation works under NCEF project.
16.	Dumpsite JCL-III Jayashree Chemicals, Ganjam	19.377793	85,051959	Mercury	DPR prepared for execution of actual remediation works under NCEF project.

24. Jul	23. Kh	22. Lo Gł		21. No Ka		20. To Na	(W)	18. Hi		17. Ra Vil Ra		Sr. No. Sit
Juhi Baburaiya (Rakhi Mandi),	Khanchandrapuri, Rania Kanpur Dehat	Lohia Nagar C Block, Ghaziabad		Noor Muhammad Kunta Lake, Katedan Industrial Estate Hyderabad		Tondairpet, Chennai, Tamil Nadu	Plot No. 25 of SIPCOT industrial estate along the NH4, Ranipet, Tamil Nadu (Waste dumped in front and back of TCCL premises.)	Hindustan Unitever Ltd . Kodaikanal Tamii Nadu		Rajasthan Village Bichhadi, Block Girva, Rajasthan		Site o
26,44522	26,405956	28.685193		17.315728		13° 7'31.09"N	12.955092	10.224714		24.589316		Latitude
80.322694	80.045717	77.432472	Utt	78 427367	1	80°17'20.91"E	79.311158	77.48709	Ta	73.823643	R	Longitude
Chromium total, heavy metals	Chromium total, Cd, heavy metals	Chromium (VI)	Uttar Pradesh (07 sites)	VOCs, Chromium, Cadmium, Lead, Copper, Zinc, Oil/fuel Hydrocarbons, PAH components	Telengana (01 site)	Petroleum Hydrocarbons, DRO, GRO, etc.	Chromium-total, Chromium VI	Mercury	Tamil Nadu (03 Sites)	Inorganic salts, Organics	Rajasthan (01 Sites)	Type of Contaminants
The study has been conducted by M/s. ERM, appointed by CPCB under NCEF project.	DPR prepared for execution of actual remediation works under NCEF project.	Groundwater remediation work is carried out by M/s SPRL		Remediation works under CBIPM project.		DPR has been prepared by M/s BPCL and Remediation works initiated.	DPR prepared for execution of actual remediation works under NCEF project	DPR has been prepared by M/s HUL and Remediation works initiated.		Assessment studies initiated by industries		Action taken/ Present Status

Sr. No.	Site o	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
25.	Shivnathpura, Rania, (Kanpur Dehat) Ramabai Nagar, Kanpur, Uttar Pradesh	26,413374	80.021637	Chromium and Chromium (VI)	DPR prepared for execution of actual remediation works under NCEF project.
26,	Chakar Village Chinhat, Lucknow	26.926555	81.067481	isomers of HCH is present in all the soil samples	DPR prepared for execution of actual remediation works under NCEF project.
27.	Uttardhauna, Chinhat Block, Lucknow	26,886526	81,055561	Isomers of HCH is present in all the soil samples	DPR prepared for execution of actual remediation works under NCEF project.
28	Deva Road, Lucknow (Palhauri Village, Deva Road, Chinhat, Lucknow)	26,99668	81.143051	Pesticide (alpha, beta, gamma, delta HCH)	DPR prepared for execution of actual remediation works under NCEF project.
			We	West Bengal (27 sites)	
53	Dhapa Disposal Site, Kolkata 700105	22.544888	88.42079	Nitrate, Phenolic Compounds, Lead, Heavy Metal, Chromium	'Closure & Containment' under CBIPM Project is ongoing
30.	Nibra Industrial Area, Howrah, West Bengal	22.603295	88.24852	Chromium(VI), Lead	DPR prepared for execution of actual remediation works under NCEF project.
31	Near Ghosh and Sarkar Weigh Bridge, Village Smila/Madpur, District- Hoogh-712201	22.44172	88.19075	Chramium-(III) and Chromium(VI)	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
32	Private Approach Road South of Nezone Tubes, Chakduni, Delhi Road, SH13, Dist-Hooghly-	22,701514	88.29688	Chromium-(III) and Chromium(VI)	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
60	BalajiTechnomech,Chakdum, Delhi Road, SH13, Dist-Hooghly-712291	22.704939	88,299087	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
34.	Shentracon Chemicals, Mollaber Delhi Road, SH13, Hooghly-712201	22.721823	88.307888	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CRIPMP) of MoEEEC

Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
112.	Balaji Technomech, Chakduni, Delhi Road, SH13, Hooghly- 712201	22.704939	88.299087	Chromium	of not remediating the sites considering the circumstances was taken as per recommendation of the MoEF&CC.
113.	Shentracon Chemicals, Mollaber Delhi Road, SH13, Hooghly-712201	22.721823	88.307888	Chromium	
114	Om Forging, Bangihati, Delhi Road, SH13, Hooghly-712201	22.731659	88.313874	Chromium	
115.	Hooghly Alloy & Steel, Dakshin Rajyadharpur, Delhi Road, SH13, Hooghly-712201	22.75224	88.318659	Chromium	
116.	Misrilall Mines, Baidyabati, Delhi Road, SH13, Hooghly- 712201	22.761698	88.314794	Chromium	
117.	Shree Krishna Timber, Baidyabati, Delhi Road, SH13, Hooghly-712201	22.791019	88.313188	Chromium	
118.	Sheela Foam, Baldyabati, Delhi Road, SH13, Hooghly-712201	22.794046	88.312994	Chromium	
119,	Sasmaipara Abandoned Dump, Baidyabati, Delhi Road, SH13, Hooghly-712201	22.790841	88.317522	Chromium	
120.	Dipendra Sasmal's House Approach Road, Baidyabati, Delhi Road, SH13, Hooghly- 712201	22.791059	88.317608	Chromium	
121.	Delhi Road, Near Shivang Trexium Pvt. Ltd. & Shree Balaji Veneers Pvt. Ltd. Netaji More, Dist. Hooghli 712201	22.738359	88.318913	Aromatic Hydrocarbon	
122	Padmabati Colony Abandoned	22,79663	88.310527	Fluoride, Cyanide	

ediation	Action taken/ Present Status
mini y/ Detailled Assessment/ Reme	Type of Contaminants
The section of the section of	Longitude
	Latitude
	Site Location
	Sr. No.

101.     Singrauli Super Thermal Power     24.102683     82.706324     Lead, Chromium, Cadmium, Mercury     Under NCEF Project, DPR prepared for execution of actual remediation works.       102.     Renukoot (ad) to M/s Aditya     83.036038     83.036038     Mercury, HCH Isomers     Probable Contaminated Site as per study carried out by MoEF&CC       103.     Barnawa Village, Baghpat, Mercury     29.051893     77.45528     Probable Contaminated Site as per study carried out by MoEF&CC       104.     Jaibheem Nagar, Ward No. 5, Firozabad     28.958541     77.761364     Lead     Probable Contaminated Site       105.     Firozabad     27.1631     78.3733     Cadmium     Probable Contaminated Site       106.     Bhadarabad, Haridwar District, Bardwar District, Bardwar District, Bardward, Brandward Carried out by Metals & Chromium     Probable Contaminated Site				The state of the s	Type of Contaminants	Action taken/ Present Status
Renukoot (adj to M/s Aditya Birla Chemical Industries (Formerly Kanoria Chemical) Barnawa Village, Baghpat, District Meerut Jaibheem Nagar, Ward No. 5, Meerut Firozabad Ibrahimpur Village, Bhadarabad, Haridwar District, Bhadarabad, Haridwar District, Uttarakhand Uttarakhand Birla Chemical B	101.	Singrauli Super Thermal Power Plant, Singrauli	24.102683	82.706324	Lead, Chromium, Cadmium, Mercury	Under NCEF Project, DPR prepared for execution of actual remediation works.
Barnawa Village, Baghpat, District Meerut Jaibheem Nagar, Ward No. 5, 28.958541 77.761364 Lead Firozabad Firozabad Jaridwar District, 29.916654 78.071495 Heavy Metals & Chromium Uttarakhand	102	Renukoot (ad) to M/s Aditya Birla Chemical Industries (Formerly Kanoria Chemical))	24,229316	83.036038	Mercury, HCH Isomers	Probable Contaminated Site as per study carried out by MoEF&CC
Jaibheem Nagar, Ward No. 5, 28.958541 77.761364 Lead Meerut Cadmium 27.1631 78.3733 Cadmium UTTARAKHAND (01 site) Bhadarabad, Haridwar District, 29.916654 78.071495 Heavy Metals & Chromium	103.	Barnawa Village, Baghpat, District Meerut	29.051893	77,45528		Probable Contaminated Site as per study carried out by MoEF&CC
Firozabad 27.1631 78.3733 Cadmium   UTTARAKHAND (01 site)   Bhadarabad, Haridwar District, 29.916654 78.071495 Heavy Metals & Chromium	104.	Jaibheem Nagar, Ward No. 5, Meerut	28,958541	77.761364	pear	Probable Contaminated Site
Bhadarabad, Haridwar District, 29.916654 78.071495 Heavy Metals & Chromium	105.	Firozabad	27.1631	78.3733	Cadmium	Probable
Bhadarabad, Haridwar District, 29.916654 78.071495 Heavy Metals & Chromium Uttarakhand	u			ATTU	RAKHAND (01 site)	
	106.	Bhadarabad, Haridwar District, Uttarakhand	29.916654	78.071495	Heavy Metals & Chromium	Probable Contaminated Site
	107.	Dhapa Disposal Site, Kolkata- 700105	22.544888	88.42079	Nitrate, Phenolic Compounds, Lead, Heavy	Under CBIPM Project of MoEF&CC, Closure & containment works is under progress
700105 Site, Kolkata- 22.544888 88.42079 Heavy	108	Tiljala, Picnic Gardens, Kolkata	22.528137	88.391094	Lead	Contaminated site as per study carried out by
Dhapa Disposal Site, Kolkata- 700105 700105 Tiljala, Picnic Gardens, Kolkata 22.528137 88.391094 Nitrate, Phenolic Compounds, Lead, Heavy Metal, Chromium	109,	Nibra-Industrial Area, Howrah, West Bengal	22.603295	88.24852	Chromium(VI), Lead	MoEF&CC Under NCEF Project, DPR prepared for
Dhapa Disposal Site, Kolkata- 22.544888 88.42079 Nitrate, Phenolic Compounds, Lead, Heavy Tiljala, Picnic Gardens, Kolkata 22.528137 88.391094 Lead Nibra Industrial Area, Howrah, 22.603295 88.24852 Chromium(VI), Lead	110.	Near Ghosh and Sarkar Weigh Bridge, Village Simla/Madpur, District-Hoogli-712201	22.44172	88,19075	Aromatic Hydrocarbons	Under CBIPM Project of MoEF&CC and WBPCB, site investigations carried out, However,
Dhapa Disposal Site, Kolkata-         22.544888         88.42079         Nitrate, Phenolic Compounds, Lead, Heavy           700105         Moltrate, Phenolic Compounds, Lead, Heavy         Metal, Chromium           Nibra Industial Area, Howrah, West Bengal         22.528137         88.391094         Lead           Near Bengal         Near Ghosh and Sarkar Weigh         22.603295         88.24852         Chromium(VI), Lead           Bridge, Village Simia/Madpur, District Hoogli-712201         22.44172         88.19075         Aromatic Hydrocarbons	1	Private Approach Road South of Nezone Tubes, Chakduni, Delhi Road, SH13, Hooghiy-712201	22.701514	88 29688	Сћготјат	verifice submitted that remediation is not required because groundwater was not contaminated, the environmental and social risks were not significant and highway expansion work was completed. The decision

	99.	98	97.	96.	95.	94.	93.	92.	91.	90.	89.	88	Sr. No.	
	Deva Road, Lucknow (Palhauri Village, Deva Road, Chinhat, Lucknow)	Uttardhauna, Chinhat Block, Lucknow	Chakar Village Chinhat, Lucknow	Shivnathpura, Rania , (Kanpur Dehat) Ramabal Nagar, Kanpur, Uttar Pradesh	Panki Industrial Area, Kanpur	Juhi Baburaiya (Rakhi Mandi), Kanpur	Nauriaya Kheda Kanpur	Khanchandrapuri, Rania Kanpur Dehat	Tejab Mill Campus, Ariwarganj, Kanpur	Shakti Nagar, Aligarh	Industrial Area Meerut Road, Ghaziabad, Uttar Pradesh 201003	Lohia Nagar C Block, Ghaziabad	Site Location	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	26.99668	26.886526	26.926555	26.413374	26.46016	26.44522	26.453965	26.405956	26.456382	27.894919	28.688404	28.685193	Latitude	List of 134 Site
JUVE CAN AND	81.143051	81.055561	81.067481	80.021637	80.226849	80.322694	80.268066	80,045717	80.320689	77.438353	77.436143	77.432472	Longitude	s Selected for Prei
	Pesticide (alpha, beta, gamma, delta HCH)	isomers of HCH is present in all the soil samples	isomers of HCH is present in all the soil samples	Chromium and Chromium (VI)	groundwater (Fluoride, nitrate, sulphate)	Chromium total, heavy metals	Chromium total,	Chromium total, Cd, heavy metals	Chromium (total)	Lead	Hexavalent Chromium, Chromium	Chromium (VI)	Type of Contaminants	List of 134 Sites Selected for Preliminary/Detailed Assessment/ Remediation
Under NCEF Project, DPR prepared for	Under NCEF Project, DPR prepared for execution of actual remediation works	Under NCEF Project, DPR prepared for execution of actual remediation works	execution of actual remediation works	under NCEF Project, DPR prepared for execution of actual remediation works	Frondoir Coindininated Site	Contaminated site	Propagie Contaminated site	execution of actual remediation works	Probable Contaminated Site	Propagie Contaminated Site	implemented by M/s SPRL (responsible unit	Groundwater remediation work is being implemented by M/s SPRL (responsible unit)	Action taken/ Present Status	on

	Action taken/ Present Status
inary/Detailed Assessment/ Remediation	Type of Contaminants
s Selected for Prelim	Longitude
LIST OF 134 SIT	Latitude
	Site Location
	Sr. No.

	Rajasthan				MoEF&CC
			TAM	TAMIL NADU (06 sites)	
79.	Eachangadu, Cuddalore, Tamil Nadu	11.683214	79,756303	Mercury	Contaminated Site as per study carried out by
80.	Hindustan Unilever Ltd., Kodaikanal , Tamil Nadu	10.224714	77.48709	Mercury	DPR has been prepared by M/s HUL and execution of actual Remediation works yet to
#T	Plot No. 25 of SIPCOT industrial estate along the NH4, Ranipet , Tamil Nadu (Waste dumped in front and back of TCCL premises.)	12.955092	79.311158	Chromium-total, Chromium VI	Under NCEF Project, DPR prepared for execution of actual remediation works
85	Tondairpet, Chennal, Tamil Nadu	13" 7'31.09"N	80"17"20.91"E	Petroleum Hydrocarbons, DRO, GRO,	Remediation works is under progress
83	Vallayambattu, Vadiumbadi, Vellore, Tamiinadu	12.698153	78,633428	Chromium-total, Chromium (VI)	Contaminated Site
84.	Tirupur, Tamil Nadu	11.11918	77.394792	Chlorine, sulphate, and manganese.	Contaminated Site
			TELA	TELANGANA (02 sites)	
52	Patancheru, Medak District . Telengana	17.533436	78.264137	Arsenic, various Chemical compounds	Probable Contaminated Site
386	Noor Muhammad Kunta Lake, Katedan Industrial Estate Hyderabad	17.315728	78,427367	VOCs, Chromium, Cadmium, Lead, Copper, Zinc , Oil/fuel Hydrocarbons, PAH components	Under CBIPMP of MoEF&CC, DPR prepared for execution of remediation works. However, the remediation works could not be taken-up due to the status quo orders issued by the Hon'bie High Court of Telangana & Andhra Pradesh in W.P. No. 39864 of 2014
			UTTAR	UTTAR PRADESH (19 cites)	
87.	Sahibabad Industrial Area	28.669502	77 341068	Chromitim and other them.	Contaminated Site as per study carried out by
		SVCC-COCC	00075577	Chromium and other Heavy Metals	MoEF&CC

	RAJASTHAN (02 sites)  Chromium (VI)			Prince Control	
	UASTHAN (02 sites)	75.79004	26.817401	Amanishahnalla, Sanganerindutrial Area, Jaipur	77.
2		RA			
12	Phenol	76.074781	30.275411	Mahaluxmi Orgo Chemical Industries, Nabha Road, Bhawanigarh, Sangrur	76.
residue, PAH Contaminated Site as per study carried out by	Heavy Metals, Pesticide residue, PAH components, Phenolic compounds, Nitrate, Sulphate, Phosphate, Ammonia, Chloride, Potassium	75.548062	31.320198	Basti Sheikh, Jalandhar	75.
Contaminated Site as per study carried out by MoEF&CC	Chromium (total)	75.512237	31.332535	PSIEC Leather Complex, Jalandhar, Punjab	74.
Probable Contaminated Site as per study carried out by MoEF&CC		75.753523	30,919485	Hambran Road MSW DumpSite, Ludhiana	73.
rganics Probable Contaminated Site as per study carried out by MoEF&CC	Heavy metals and organics	75.906736	30.928623	Tajpur road MSW Sumpsite, Ludhiana	72.
	Chromium (VI) , Zinc, Inorganic acids, Lead	75.90332	30.919455	Buddha Nullah, Ludhiana, Punjab	71.
	PUNIAB (06 sites)	P			
Total Probable Contaminated Site	Chromium (VI) , Cr Total	84.762821	22.222555	Konark Crome Chemicals & Lotus Chemicals (Closed). Site RKL-IV	70.
	Chromium (VI) , Chromium Total	84.770682	22.221428	Konark Crome Chemicals & Lotus Chemicals (Closed) RKL- III, Rourkela	69
				RKL-II	
Action taken/ Present Status	Type of Contaminants	Longitude	Latitude	Site Location	Sr. No.

Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
57.	Site NALCO-I, M/snational Aluminum Co. Products, Angul	20.831763	85.161234	Fluoride, Cyanide	Probable Contaminated Site
58.	ORICHEM abandoned site, Talcher, Orissa	20.925735	85.17287	Chromium VI	Under NCEF Project, DPR prepared for execution of actual remediation works
59.	Site NALCO-II,M/sNational Aluminum Co. Products, Angul	20.821955	85.158576	Fluoride, Cyanide	Probable Contaminated Site
.09	Site NALCO-III,M/s National Aluminium Co. Products, Angul	20.82095	85.157922	Fluoride, Cyanide	Probable Contaminated Site
61.	Dumpsite JCL-I, Jayashree Chemicals, Ganjam	19.378006	85.051354	Mercury	Under NCEF Project, OPR prepared for execution of actual remediation works
62.	Dumpsite JCL-II Jayashree Chemicals, Ganjam	19,381236	85,052652	Mercury	Under NCEF Project, DPR prepared for execution of actual remediation works
63.	Dumpsite ICL-III Jayashree Chemicals, Ganjam	19.377793	85,051959	Mercury	Under NCEF Project, OPR prepared for execution of actual remediation works
64.	Site INDAL-I (M/s Indian Aluminium Company Limited), HINDALCO Hirakud	21.530143	83.907851	Fluoride, Cyanide	Probable Contaminated Site
65.	Site INDAL-II (M/s Indian Aluminium Company Limited), HINDALCO, Hirakud, Sambalpur	21 519962	83.902391	Fluoride, Cyanide	Probable Contaminated Site
.99	Site INDAL-III (M/s indian Aluminium Campany Limited), HINDALCO, Hirakud, Sambaipur	21.534566	83.912470"	Fluoride, Cyanide	Probable Contaminated Site
.09	Konark Chrome Chemicals & Lotus Chemicals (Closed) Site RKL-I	22.234709	84.72228	Chromium (VI), Chromium Total	Probable Contaminated Site
.89	Konark Chrome Chemicals & Lotus Chemicals (Closed) Site	22.236011	84,761129	Chromium (VI) , Cr Total	Probable Contaminated Site

Sr. No.	Site Location	Latitude	Langitude	Туре	Latitude Longitude Type of Contaminants
47.	Naregaon dumping site, Aurangabad city	19.89525	75.397139	Cadmium	
48	M/s Godavari Bio-Refineries, Ahmed Nagar District, Maharashtra	19.8233337	74.56901795	Colour and COD, SO <sub>4</sub> , Chlorides and volatile fatty acids	s and
			10	ODISHA (22 sites)	
49.	Gypsum Pond -Paradip Phosphate & IFFCO, Paradip, Orissa	86.626326	20.258112	Fluoride, Phosphate, Chloride	oride
50.	Site KCL I, , Inside the premises of M/s KCL near H2SO4 Tank	21.597685	86,930532	Chromium	
51.	Site KCL II, Inside the premises of M/s KCL near Gate, Mayurbhanj Orissa	21.598039	86.929221	Chromium	
52.	Site KCL III, Inside the premises of M/s KCL inside drier room, Mayurbhanj Orissa	21.597189	86.928847	Chromium	
53	Site KCL IV, outside the premises of M/s KCL near Northern Boundary-Mayurbhanj Orissa	21.599929*	86.930313	Chromium	
54.	Site KCL V, outside the premises of M/s KCL near main Gate; Mayurbhanj Orissa	21.598007	86.928121	Chromium	
55.	Site ECFC-I Mayurbhanj. Orissa	21.603934	86,930121	Fluoride Vanadium	
56	Site ECFC-II Mayurbhani.	355303.55	86 929107	Elizade Vanadium	

	Action taken/ Present Status
minary/Detailed Assessment/ Remediation	Type of Contaminants
s Selected for Preli	Longitude
List of 134 Site	Latitude
	Site Location
	Sr. No.

te 12.964087 77.556605  ur 12.902887 77.631954  13.025538 77.525031  12.140193 76.67652  KERA  9.972931 76.248505  10.079547 76.294582	Sr. No.	Site Location  Mavallipura Dumpsite,  Yelahanka, Banglore	List of 134 Sin Latitude 13.122438	Longitude  Longitude  KAR  77.53775	List of 134 Sites Selected for Preliminary/Detailed Assessment/ Remediation  Latitude Longitude Type of Contaminants  KARNATAKA (05 sites)  13.122438 77.53775 Chromium, Heavy Metals	n  Action taken/ Present Status  Contaminated Site as per study carried out by  MoEF&CC
Mangamanapalya Road, Hosur Road, Bangalore, Karnataka Peenya Industrial area, Bangalore, Karnataka 13.025538 77.525031 Cauvery River, downstream Nanjangud, Mysore District, Karnataka 12.140193 76.67652 Karnataka Kalamukke Lake, Kochi 9.972931 76.248505 Kuzhikandom Thodu, Kerala 10.079547 76.248505 Ammanthuruthu- Karipadam 10.083385 76.288432 Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	29	Goripalya near Mysore Road, Bangalore, Karnataka, E-waste recycling in Bangalore,	12.964087	77.556605	Main compound is Cadmium. Other compounds are: Lead & Mercury, Beryllium, Chromium, Arsenic, PCBs,	Other cury, c, PCBs,
Peenya Industrial area, Bangalore, Karnataka Cauvery River, downstream Nanjangud, Mysore District, Karnataka  Kalamukke Lake, Kochi Kuzhikandom Thodu, Kerala Kuzhikandom Thodu, Kerala  Ammanthuruthu-Karipadam Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	30.	Mangamanapalya Road, Hosur Road, Bangalore, Karnataka	12.902887	77.631954	Lead	
Cauvery River, downstream Nanjangud, Mysore District, Karnataka  Karnataka  Kalamukke Lake, Kochi  Kuzhikandom Thodu, Kerala  Kuzhikandom Thodu, Kerala  10.079547  Ammanthuruthu-Karipadam  Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	31	Peenya Industrial area, Bangalore, Karnataka	13.025538	77,525031	Heavy Metals like Zn , Cr,& Pb	& Pb
Kalamukke Lake, Kochi 9.972931 76.248505  Kuzhikandom Thodu, Kerala 10.079547 76.294582  Ammanthuruthu- Karipadam 10.083385 76.288432  Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	32	Cauvery River, downstream Nanjangud, Mysore District, Karnataka	12.140193	76.67652	Lead	
Kuzhikandom Thodu, Kerala  Kuzhikandom Thodu, Kerala  10.079547  76.248505  10.079547  76.294582  Annmanthuruthu- Karipadam  Annmanthuruthu- Karipadam  Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc				KI	ERALA (06 sites)	
Kuzhikandom Thodu, Kerala  10.079547  76.294582  Ammanthuruthu- Karipadam  Ammanthuruthu- Karipadam  Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	33	Kalamukke Lake, Kochi	9.972931			
Ammanthuruthu-Karipadam  10.083385  76.288432  Edayar, Edayattuchal Kochi, Kerala (in & around the premises of M/s. Binani Zinc	34	Kuzhikandom Thodu, Kerala	10.079547	76.294582	DDT, Endosulfan, Dicofol, Phosphate and Ammoniu Thorium oxalate, Rare-ea and Rare-earth chloride, Sulphamides and antio	Ammonium im Sulfate, irth fluoride Thiozoles, ixidants.
Edayar, Edayattuchal Kochi, Kerala (In & around the premises of M/s. Binani Zinc	35	Ammanthuruthu- Karipadam	10.083385	76.288432	DDT, Endosulfan, Dicofol, Ammonium Phosphate and Ammonium Sulfate, Thorium oxalate, Rare-earth fluoride and Rare-earth chloride, Thiozoles, Sulphamides and antioxidants.	mmonium n Sulfate, h fluoride hiozoles, idants.
					7	nds

		List of 134 Sit	es Selected for Pre	List of 134 Sites Selected for Preliminary/Detailed Assessment/ Remediation	uc
Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
19.	Ankleshwarinduatrial Estate, GIDC Industrial Estate, Ankleshwar. Bharuch, Ankleshwar	21.633139	73,045806	Mercury, Heavy Metals	Detailed study is required
20,	TSDF site, GIDC-Vapi, Valsad,	20.357527	72.945348	Zinc, Copper, Chromlum, Lead, Cadmium, Mercury, Arsenic, PCB, VOCs	Contaminated Site as per study carried out by MoEF&CC
21.	Gorwa Pond, Vadodara Gujarat, Behind Hema Chemicals, Near Samta Colony, Subhanpura Road, Vadodara	22.329995	73.159486	Hexavalent Chromium, Chromium, Lead	Contaminated
			HA	HARYANA (03 sites)	
22	Pace City-II, Sector 37. Gurgaon Haryana	28.428392	76.999501	Metals (Chromium , Mercury), PAH , TPH, VOCs , PCB	Contaminated Site as per study carried out by MoEF&CC
23.	Prem Colony, Kundil, Sonepat	78,869167	77.114722	Lead	Contaminated Site as per study carried out by MoEF&CC
24,	Sectors 25 & 26, Dyeing Industry, Panipat, Haryana	29.358076	76.991748	Mercury – elemental	Probable Contaminated Site as per study carried out by MoEF&CC
			HIMACH	HIMACHAL PRADESH (01 site)	
25,	Housing Board Phase III, Baddi, Himachal Pradesh	30.938802	76.807437	Chromium (Total)	Contaminated Site as per study carried out by MoEF&CC
				1	

Contaminated Site as per study carried out by

MOEF&CC

Lead

86.150665

22,835772

Swarnarekha River Polluted Site, Seraikella-Kharswan, Jharkhand

263

Probable Contaminated

Asbestos

86.329453

22.65801

Roro hills Iharkhand Manikui – Chandil,

26.

JHARKHAND (02 sites)

Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
				GOA (01 site)	
				The state of the s	The state of the s
12	M/s Sunrise Zinc Ltd., Plot No. L-2 & M/S Nicomet Industries Ltd Plot no. L-15 ,19 & 20, Cunicolum Industrial Estate, Punjim, Goa	15,188028	74.029719	Chromium, Copper, Cobalt, Cadmium, Arsenic ,Zinc	Contaminated
			GL	GUJARAT (09 sites)	
Б	All GIDC Industries Association Reg No. G 904, DT-26/4/1983, Plot No. 121, Road AB Corner, All GIDC Estate Rajkot	22.292041	70.816407	Lead	Not Contaminated
14.	Larsen Chem, 8/2, Ganeshpura, Opp Janta Petrol Pump, Modasa Sabar kantha, Gujarat	23,475619	73 291149	Total chromium, Arsenic, Cadmium, Lead, Mercury, Zinc	Bore wells of surrounding area were found as contaminated
15	Swastik Organic, survey no 93 paiki, Sabar Dairy Road, Piplodi, Gujrat	23.592505	72.972861	Zinc, Lead , VOCs, Aromatic Hydrocarbons (BTEX)	Bore wells were not found as contaminated bu- old hazardous waste is still not removed
16.	Effluent Channel Project Limited (ECPL) (Baroda Effluent Canal) Vadodara and Bharuch District	22.342609	73.151402	Volatile Organic Compound	Remediation works carried out by group of industries (responsible industries for contamination)
17.	Hema Chemicals Unit II, Nandesari, Vadodara	22.334526	73.162039	Chromium	Contaminated
500	Jambusar, District- Bharuch,	22.049444	73.045806	Lead, Cyanide, VOCs, Phenois, organics	In wet season colour runoff water from chemical estate in storm water drain is observed. Detailed study is required to declar a significant contaminated site.

		IN THE PART OF THE	ia ini namatac car	tast of 134 sites selected for Preliminary/Detailed Assessment/ Remediation	on
Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
			ANDH	ANDHRA PRADESH (01 cite)	
H	Kadapa Dump site, Kadapa, Andhra Pradesh	14.285196	78.50386	Lead, Zinc and other heavy metals	Under CBIPM Project of MoEF&CC, Closure & containment works is under progress
			4	ASSAM (01 site)	
2.	Rangia, District-Kamrup, Assam	26.496658	91.592305	Chromium (Total)	Contaminated Site as per study carried out by MoES.C.C.
				BIHAR (01 site)	
8	Hathidah Khurd village, Mokama Block, Patna District, Bibar	25.38011	85,97455	Arsenic	Contaminated Site as per study carried out by MoEF&CC
			СННО	CHHATTISGARH (03 site)	
4	Bhilai steel plant, Chhattisgarh	21.1696111	81.400078	Lead, arsenic, mercury, Polychlorinated biohenvis	Contaminated Site as per study carried out by MAEF&CC
uń.	Chhattisgarh, BALCO, Korba	22.401924	82.738369	Lead, Cyanide & F	Contaminated Site as per study carried out by MoEF&CC
			9	DELHI (06 sites)	
.9	Open land adjoining to 165, Patparganj Industrial Area, Delhi-110092	28.534464	77.277869	Cadmium, Lead, Chromium, Arsenic	Investigation study conducted by DPCC
7.	Gazipur landfill-site, Gazipur, Delhi	28.625153	77.328056	Lead, Cadmium, Chromium, Copper,	Contaminated Site as per study carried out by
00	Ihilmil Industrial Area , New Delhi	28.673487	77.31357	Metals, PAH, TPH, VOC's PCB	Contaminated Site as per study carried out by
6	Road side & in front of C-58/1, Essco Sanitations, Wajirpur Industrial Area, Delhi	28.699359	77.172297	Chramium (Total)	Contaminated
265	Badii Industrial Area, Delhi	28.747886	77.127075	Chromium (Total)	Contaminated Site as per study carried out by MoFF&CC
11.	Seelampur e-waste site, Shahadara, East Delhi	28.719159	77,314923	Arsenic, Chromium, Lead	Contaminated Site as per study carried out by

Sr. No.	Site o	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
	712201		811		(CBIPIAP) of MoEF&CC.
52.	Near Zenith Timber products, Near Netaji More, Dist. Hooghli-712201	22,45059	88.18553	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
23	Near Pashupati Seong and East India Flour Mills, Delhi Road, Dist. Hooghli-712201	22,48188	88.18527	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
54.	Ashalata Brick field, Near Indoran industries, Houghli-712201	22.50458	88.19021	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
N.	Near M/a Shivam Gases Ltd., Chakundi Induspies Area, Dankuni Hooghii. 712310	22,42274	88.17434	Not knewn	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&.CC.

45. Sada Shiv Shakti Exim. 22.80093 Baidyabati, Dist	F22West Bengai-712201	46. Bhola Babs Corrugated Hox, 22.810741 Bighnti, Delhi Rond, SH13, Dist-Hooghly	Bhola Baba Corrugated Box, Bighati, Delhi Road, SH13, Dist-Hooghly  Steel Cracker Unit II, Bighati, Delhi Road, SH13, Dist-Hooghly-712201	Bhola Baba Corrugated Box, Bighati, Delh Road, SH13, Dist-Hooghly  Steel Cracker Unit II, Bighati, Delhi Road, SH13, Dist-Hooghly-712201  Somer Bangla Hindu Hotel, Bighati, Delhi Road,SH13, Dist-Hooghly-712201	P22West Bengal-712201  Bhola Baba Corrugated Hox, Bighati, Delh Road, SH13, Dist-Hooghly  Steel Cracker Unit II, Bighati, Delhi Road, SH13, Dist-Hooghly-712201  Somer Bangla Hindu Hotel, Bighati, Delhi Road, SH13, Dist-Hooghly-712201  Appayan Hotel Dump, Bighati, Delhi Road, SH13, Dist-Hooghly-712201	F22West Bengal-712201  Bhola Babs Corrugated Box, Bighati, Delh Road, SH13, Dist-Hooghly  Steel Cracker Unit II, Bighati, Delh Road, SH13, Dist-Hooghly-712201  Somer Bangla Hindu Hotel, Bighati, Delhi Road, SH13, Diat-Hooghly-712201  Appayan Hotel Dump, Bighati, Delhi Road, SH13, Dist-Hooghly-712201  Indotan Chemicals, Garji, Delhi Road, SH13, Diat-Hooghly-712201
50093 88.314196		88.314539				142
6 Not known		9 Not Jengwn				
Initiated under Capacity Building Programme	(CBIPMP) of MoEF&CC	(CBIPMP) of MoEF&CC  Initiated under Capacity Building Prog for Industrial Pollution Management I (CBIPMP) of MoEF&CC.	(CBIPMP) of MoEF&CC  Initiated under Capacity Building Prog for Industrial Pollution Management F (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Prog for Industrial Pollution Management F (CBIPMP) of MoEF&CC.	(CBIPMP) of MoEF&CC.  Initiated under Capacity Building Progrif or Industrial Pollution Management P (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Progrif or Industrial Pollution Management P (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Progrif Industrial Pollution Management P (CBIPMP) of MoEF&CC.	(CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.	(CBIPMP) of MoEF&CC  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.  Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.

Sr. No.	Site o	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
55	Om Forgung, Bangshati, Delhi Road, SH13, Dist Hooghly-712203	22.731659	88.313874	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
36,	Hooghly Alloy & Steel, DaksturRajyadharpur, Delhi Road, SH13, Distr Hooghly-712201	22.75224	88.318659	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
37.	Misriall Mines, Baidyabatt, Delhi Road, SH13, Dist-Henghly-712201	22.761698	88,314794	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
80	Shree Krishna Timber, Baidyahati, Delhi Road, SH13, Dist-Hooghly-712201	22.791019	88.313188	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
39	Sheela Foam, Baidyabati, Delhi Road, SH13, Dist-Hooghly-712201	22.794046	88.312994	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
40	Sasmalpara Abandoned Dump, Baidyabati, Delhi Road, SH13, Diat- Hoeghly-712201	22.790841	88.317522	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
41.	DipendraSaamal's House Approach Road, Baidyabati, Delhi Road, SH13, Dist-Hooghly.	22.791059	88.317608	Nor known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.
42.	Delhi Road, Near Shivang Trexium Pvt. Ltd. & Shree Balaji Veneers Pvt. Ltd. Netaji More, Dist. Hooghil (HW site. 3 in NPC report from 2006)- 712201	22.738359	88.31891,3	Not known	Initiated under Capacity Building Programme for Industrial Pollution Management Project (CBIPMP) of MoEF&CC.

Sr. No.	Site Location Road, SH13, Hooghly- 712201	Latitude	Lon	Longitude
123	Padmabati Colony Abandoned Dump 2, Baidyabati, Delhi Road, SH13, Dist-Hooghly- 712201	22,797191	88.309626	
124.	Sada Shiv Shakti Exim, Baidyabati, Opp. To Zenith Timbers, Hooghly -712201	22.80093	88.314196	
125	Bhola Baba Corrugated Box, Bighati, Delhi Road, SH13, Hooghly	22 810741	88.314539	
126	Steel Cracker Unit II, Bighati, Delhi Road, SH13, Hooghly- 712201	22.811275	88.312007	
127.	Sonar Bangla Hindu Hotel, Bighati, Deihi Road,SH13, Dist- Hooghly-712201	22.820808	88.315351	
128.	Appayan Hotel Dump, Bighati, Delhi Road, SH13, Dist- Hooghly-712201	22.824249	88.315548	
129.	Indotan Chemicals, Garji, Delhi Road, SH13, Dist-Hooghly- 712201	22.849622	88.318994	
130,	Near minu weigh bridge, Delhi Road (100 mt from Netaji More) Near Dhaba, Dist. Hooghli- 712201	22.79771.9	88.313953	
111	Near Zenith Timber products, Near Netaji More, Hooghli-	22.45059	88.18553	

		List of 134 Sit	es Selected for Prelim	List of 134 Sites Selected for Preliminary/Detailed Assessment/ Kemediation	uo.
Sr. No.	Site Location	Latitude	Longitude	Type of Contaminants	Action taken/ Present Status
	Near Pashupati Seong and				
132.	East India Flour Mills, Delhi Road, Dist. Hooghli-712201	22.48188	88.18527	Chromium	
	Ashalata Brick field, Near				
133.	Indotan industries, Hooghii- 712201	22.50458	88.19021	Chromium	
134.	Near M/s Shivam Gases Ltd., Chakundi Industries Area, Dankuni Hooghli712310	22.42274	88.17434	Chromium	

\*\*

	List of 1	95 Sites Yet to be	Assessed	
5. No.	Site Location	Latitude	Longitude	Type of Contaminants

	ANDHRA	PRADESH (02	Sites)	
1.	Rithwik energy systems (biomass power plant), Rachagunneri, Chittoor district, Andhra Pradesh- 517325	13.7228	79.63	Hexavalent Chromium, Chromium
2.	Madhurawada, Vishakhapatnam, Andhra Pradesh - 530048	17.49	83.212	Mercury
	AS	SAM (03 Sites)	(	
3.	Dhemaji District, Assam- Pincode- 787058	27.284908	94.330271	Chromium, Lead
4.	Hindustan Paper Corporation Limited, Jagiroad, Morigaon district, Assam- 782413	26.1317	92.2123	Mercury, Copper, Zinc
5.	Jeypore Coalfield, Namrup, Tinsukia, Assam-786614	27.1555666	95.22258	Cadmium, Mercury Lead, Zinc, Copper
	SWIFTIGE STATE OF THE SECOND STATE OF THE SECO	TISGARH (03 S	ites)	
6.	Nandini-Khundani Abandoned Mines, bhilai, DisttDurg Near M/s Vishnu Chemicals, Industrial Area, Bhilai 491001	21.31114	81.366038	Chromium
7.	Muckdum Side Bhilai-3 Bhilai steel plant-491000	21.20528	81.361957	Lead, Arsenic, Mercury, Polychlorinated biphenyls
8.	Lal Ghat Risdi Area, nearM/s Balco Korba-495677	22.39405	82.733267	Lead, Cynide, Fluoride
	D	ELHI (22 Sites)		
9,	Open land in front of 366, Patparganj industrial Area- 110092	28.61808	77.293119	Not Known
10.	Near Railway Line and Gali NO. 4 & 5, New Friends Colony Industrial Area, Delhi-110026	28.567462	77.269133	Not Known
11	Road side & in front of C-58/1, Essco Sanitations, Wajirpur Industrial Area-110052	28.699359	77.172297	Chromium
12.	Mundika, Delhi-110041	28.67693	77.03791	Lead, Cadmium, Mercury
13.	Mandoli Village, North-eastern Delhi-110093	28.70963	77.31129	Lead, Cadmium, Mercury
14.	Road side and in front of A-5, Lawrence road industrial area, Del-110032	28.661457	77.295291	Polychlorinated Dioxins, Phthalates, Ethylene Dichloride, PCB:
15.	Road side & in front of Sulabh Complex, Near Police Chowki, Wajirpur Industrial Area, Delhi- 110052	28.69538	77,16002	Chromium

	List of 1	195 Sites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants

16.	Open Land adjacent to Ajit Printers B-58 Damodar Park, Dilshad Garden Industrial Area, Delhi -110052	28.684409	77.31522	Not Known
17.	Nimri Village, Shastri Nagar industrial area, New Delhi. 110031	28.668726	77.179133	Lead, Chromium
18.	Yamuna River at Badarpur, New Delhi-110044	28.627323	77.254186	Other / Not Known
19.	Kirti Nagar Industrial Area- 110015	28.647909	77,144	Arsenic, Cadmium, Lead
20.	Najafgarh drain, Kakrola, New Delhi-110078	28.598435	77.022021	Arsenic
21.	Naraina industrial area, Phase 1- 2, South-West, NewDelhi-110028	28.630191	77.141537	Cadmium, Lead, Chromium, Arsenic
22.	Sarita Vihar, New Delhi-110076	28.534525	77.293669	Mercury, Chromium, Cadmium, Lead, VOCs (Chloroform, Dichloromethane, Trichloroethene, Vinyl- chloride), Aromatic Hydrocarbons (Toluene
23.	Open land adjoining to plot no. 36 A & 34 A, Rajasthan Udyog Nagar Industrial Area, Delhi 11003	28.681389	77.087317	Not Known
24.	GTK Road industrial area- New Delhi-110033	28.695533	77.185181	Not Known
25.	Open land in front of 77, SSI Industrial Area, Delhi-110033	28.730974	77.15843	Not Knawn
26.	Open land which is on back side of Anuradha Petrol Pump and near to C-32, Rajdhani roller for mill, Lawrence road industrial area- Delhi-110035	28.683724	77.152642	Not Known
27.	Road side and in front of A-5, Lawrence road industrial area- Delhi-110035	28.683724	77.152642	Not Known
28.	Bhalsawa Landfill, New Delhi- 110033	28.740531	77.158673	Lead, Cadmium, Arsenic
29.	Between the Railway line and in front of 17 Gali No. 3, Anand Parbat Industrial Area, Delhi- 110005	28.66343	77.1729	Lead, Cadmium, Arsenic
30.	Railway Land near 18/32, Gali No.5, Anand Parbat Industrial Area, Delhi-110005	28.66343	77.1729	Lead, Cadmium, Arsenic

	List of 1	95 Sites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants

	G	OA (01 Sites)		
31.	Quarry located in Village Pilium of Dhar Bandora Survey No 46- Goa -403401	15.381496	74.114601	Zinc, Nickel, Cadmium, Total Chromium, Lead, Pretilachlor, Thiomethoxam, Monochrotophos, Profenophos,
	GUJ	ARAT (15 Sites	3)	
32.	Jamnagar Refinery, Gujarat- 361142	22.342455	69.859947	Oil Hydrocarbons
33,	Muthia Village, Naroda GIDC, Phase IV, Ahmedabad 2 Sites- 380330	23.088065	72.671572	Chromium, Cadmium, Lead
34.	PariYetj Community Reserve, Kheda, Gujarat-387225	22.77	72.628	Lead, Cadmium
35.	Salvav, Vapi, District Valsad, Gujarat Salva, Gujrat	20.3462	72.906662	Chromium, Cadmium, Mercury, PAH components
36.	Pandesara, Gujarat Industrial Development Corporation (GIDC), Surat, Gujarat-394230	21.154722	72.826389	Chromium
37.	Hatorah Village Kosamba Taluka, Surat Gujarat- 395003	21.46944	72.95085	Chromium, Cadmium, Arsenic, Zinc, Lead, ,Copper, VOCs
38.	River Par Atul, Valsad District Gujarat - 396001	20.532867	72.945129	Lead
39.	Daman Ganga River, Behind railway track near CETP, Vapi - Gujarat- 396191	20.342919	72.906045	Lead, Cadmium, Chromium, Copper, Mercury.
40.	Dungri Falia Millat Nagar, Behind Hotel Good Luck, Vapi- Gujarat- 396191	20.347601	72.942366	Sodium, Sulphate, Chloride, Potassium, Nitrate, Magnesium
41.	Premises of Trans Global, P. No: A-1-4311, Phase 4, GIDC, Vapi- Gujarat-396195	20.356437	72.945001	Sodium , Sulphate, Chloride, Potassium , Calcium, Nitrate, Magnesium
42.	Premises of Gamma Colours, P. No: 1302, Phase 3, GIDC Vapi- 396195	20.361023	72.924904	Sodium, Sulphate, Chloride, Potassium, Calcium, Nitrate, Magnesium
43.	Bank of Bhil Khadi, Behind Hotel Safari, Near NH-No:8, Vapi- 396191	20.354019	72.909687	Sodium , Sulphate, Chloride, Potassium , Calcium, Nitrate, Magnesium
44.	Bank of Bhil Khadi, Salvav, NH- No;8, Vapi-396191	20.34253	72.868319	Not known

S. No.	Site Location	Latitude	Longitude	Type of Contaminants
3. NO.	Site Location	Latitude	Longitude	Type of contaminants
45.	Lord Seaside Society, a Parsi Settlement at Tadgam, Valsad- 396135	20.280374	72.75848	Chloride, Ammoniacal Nitrogen, Phenolic Compound, Sulphides, Zin
46.	Valad, Dist-Gandhinagar			Dye chemicals
100.00	HAR	YANA (14 Site	s)	311
47.	New Industrial Town (NIT) Faridabad, Haryana 121001	28.372002	77.287093	Nickel, Cadmium, Zinc, Tin Chromium, Lead, Copper, O-cresol, VOCs (Trichloroethane), PAH components (Fluoranthene)
48.	Palla Village, Faridabad District, Haryana-121003	28.43	77.32	Pestcides, Nickel, Cadmium, Zinc, Tin, Chromium, Lead, Copper, O-cresol, VOCs PAH components (Fluoranthene), Aromatic, Hydrocarbons (Benzene, Toluene, Xylene)
49.	Autopin Colony, Sector-22, Fardabad	28.365498	77.293754	cyanide cadmium, other heavy metals
50.	Agra Canal, Near Sector-25, Faridabad, Haryana	28.335662	77.307615	lead, cadmium
51.	Nalla Near Sector-22, Faridabad, Haryana	28.365498	77.293754	lead, cadmium
52.	Sahraul village, Sector -18, Gurgaon, Haryana, 122015	28.4906	77.0719	Chromium
53.	Open Space in front of 360E PACE City -2, Sector 37- B Gurgaon- 122002	28.436365	76.995535	Cadmium, Lead
54.	Near Gayatri Automation ,PACE City -2, Sector 37 Gurgaon-122002	28.435075	76.997359	Cadmium, Lead
55.	Bajghera Village, Palam Vihar, Gurgaon, Haryana-122017	30.92607	77.09528	Lead
56.	Bandhwari, landfill site, Gurgaon 122001	28.413482	77.157755	Nitrate, Chromium, Nickel Copper
57.	Near Bhindawas Bird Sanctuary, Jhajjar, Haryana-124507	28.413482	76.553121	Not Known
58.	Ganesh Colony , Mehrana Village Panipat	28.6855	76.6658	Asbestos, Cadmium, Calcium fluoride, Copper, Zinc
59.	Pinjore-Baddi Highway from Village Kona to Maranwala, Panchkula	30.798975	76.911863	Not Known
60.	Manakpura Industrial Estae, Jagadhari to Yamuna River,	30.11948	77.27537	Lead

Yamuna Nagar

List of 195 Sites Yet to be Assessed

	List of 1	95 Sites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants

	HIMACHA	L PRADESH (0	5 Sites)	
61.	River Markandaya, Kala Amb, Sirmour, Himachal Pradesh- 173030	30.2948	77.12521	Cadmium, Pesticides (Aldrin, Dieldrin)
62.	Parwanoo Block, Solan District, Himachal Pradesh-173212	30.84528	76.95351	Pesticides
63.	River Kaushalya, Village Khadeen, Parwaanoo Block, Solan District, Himachal Pradesh-173212	30.84528	76.95351	Cadmium
64.	Open area along Sandholi Nala, Opposite Keshav Auto, Baddi Nalagarh Highway NH-21A- 173205	30.5631	76.4658	Asbestos, Toluene, VOC (Chloroform, Dichloromethane, Trichloroethene, Vinylchloride)
65.	Kala Amb, Trilokpuri road, Himachal Pradesh- 173030	30.49701	77.21107	Cadmium, Pesticides (Aldrin, Dieldrin)
	JHAR	KHAND (12 Sit	es)	NEW TOTAL
66,	Sindri - Damodar Polluted Site Dhanbad-826001	23.66789	86.490044	Lead
67.	Chandrapura Thermal Power Station DVC Bokaro Jharkhand - 827001	23.737234	86.101322	PAH components (Fluorides)
68.	Sonari Chatt Ghat Subarnarekha River Polluted, Jamshedpur, Jharkhand-831001	22.83549	86.16171	Heavy metals
69.	Domohani Kharkai River Jamshedpur, Jharkhand-831001	22.83549	86.16171	Lead
70.	Kandra Polluted Site, Seraikella- Kharswan, Jharkhand-831001	22.85762	86.05332	Chromium
71.	Shib Ghat Jugsalai Kharkai River Contaminated Site, Jamshedpur, Jharkhand-831001	22.78176	86.21304	Cyanide, Zinc, Nickel, Lead Copper, Radionuclides
72.	Chasnala - Damodar River Polluted Site Dhanbad Jharkhand- 826001	23.646838	86.460928	Lead
73.	Lupungdih Subarnarekha River Polluted Site, East Singhbhum Jharkhand-831001	22.782011	86.29601	Lead, Cadmium
74.	Ghatshila, Subarnarekha River, East Singhbhum, Jharkhand- 831001	22.5915	86.4531	Cadmium
75.	Ratanpur Raghunathpur Kanki, Seraikella Kharswan, Jharkhand- 832401	22.87095	86.06467	Chromium

	LIST OF 195 SI	tes Yet to be	nasesseu	
5. No.	Site Location	Latitude	Longitude	Type of Contaminants
76.	Adityapur Ind. Area, Near Jamshedpur, Behind Pepsi Factory,Ranchi-834002	22.793591	86.137337	Not Known
77.	Pataratu Thermal Power Plant, Jharkhand Electricity Board, Paratu Village Ranchi 834002	23.64073	85.29272	SO <sub>2</sub> , NO <sub>4</sub> , SPM
		ATAKA (20 Sit	es)	
78.	Agara Lake,Banglore city,Karnataka-560102	12.55106	77.383447	Lead
79.	Vrishabavati River, Bangalore- 560001	12.94417	77.528534	Chromium
80.	Hebbal Lake, Banglore, Karnataka-560024	13.04622	77.58579	Lead
81.	Begur road, Banglore, Karnataka- 560068	12.53389	77.37129	Chromium, Lead, Iron, Zino Nickel, Copper
82.	Federal Mughal Pvt Ltd Doddaballapur Road, Yetlahanka, Bangalore, Karnataka-560064	12.99653	77.610855	Chromium VI, Chromium Total
83.	Peenaya Industrial Estate, II Stage Bengluru-560058	13.03496	77.52257	Lead, Zinc, Copper, Cadmium, Hexavalent Chromium, Chromium, Nickel
84.	Peenaya Industrial Estate, IV Stage Bengluru-560058	13.01945	77.498394	Lead, Zinc, Copper, Cadmium, Hexavalent Chromium, Chromium, Nickel
85.	Ballandur Lake, Bangalore, Karnataka-560103	12.927	77.668	Cadmium
86.	Arekere lake, Bangalore, Karnataka-560076	12.57	77374	Lead
87.	Kengeri tank, Bangalore, Karnataka-560060	12.9174	77.49	Cadmium
88.	Madiwala Lake,BTM 2nd Stage,Banglore,Karnataka-560076	12.541739	77.364947	Lead
89.	Lalbagh Lake, Bangalore, Karnataka-560004	12.945	77.585	Lead
90.	Peenaya Industrial Estate, I Stage Bengluru-560058	13.03845	77.526102	Lead, Zinc, Copper, Cadmium, Hexavalent Chromium, Chromium, Nickel
91.	Metagalli industrial area Mysore city, Karnataka, India-570016	12.36005	76.632649	Not known
92.	Hebbal Industrial area Mysore city, Karnataka, 570020	12.36123	76.600777	Not known
93.	Hootagaili Industrial area Mysore city, Karnataka, India-570023	12.35368	76.583731	Not known

	List of 195 S	ites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants
	1 - X			
94.	Tumkur Amanikere Lake Watershed, Karnataka, 572101	13.3533	77.110291	Not Known
95.	Harihar Taluk, Davengere District, Karnataka - 577601	14.51139	75.808056	Fluoride
96.	Dandeli, Karnataka-pincode- 581325	15.23804	74.615057	Dioxins
97.	Bidar, Karataka (Vani Oragnics Pvt. Ltd.)			Inorganic salts
	KEF	RALA (07 Sites		
98.	Brahmapuram, Kochi - 682303	9.996742	76.37336	Not Known
99.	Eloor Industrial area, Cochin, Kerala - 683501	9.928575	76.265917	Pesticides (DDT, Endosulfan, Dicofol), Ammonium Phosphate and Ammonium Sulfate, Thorium oxalate, Rareearths Fluoride and Rareearths chloride, Thiozoles, Sulphamides and antioxidants.
100.	Periyar River, Vandiperiyar, District - Idukki, Kerala - 685533	9.572583	77.075443	Pesticides (Aldrin, Diedrin, Endo sulfan beta)
101	Meenachil River, Kottayam, Kerala	9.383719	76.344496	Cadmium, Lead
102	Vembanad (Vembanad Kayal or Vembanad Kol), Kottayam, Kerala	9.881111	76.306111	Chromium, Lead, Cadmium
103.	Ashtamudi Lake, Kollam District, Kerala - 691602	8.974994	76.626912	Cadmium
104.	Parvathy Puthanar, Thiruvananthapuram, Kerala - 695001	8.487495	76.94862	Cadmium
	MADHYA	PRADESH (14	Sites)	
105.	Deoguradiya (Munciple landfill) Site, Near Devguradia, Indore - 452001	22.675556	75.926667	Chromium, Lead, Cadmium
106.	Ratlam Industrial Area-457001	23.362234	75.048865	Sulphate, Chlorides, Aluminium, Iron
107.	M/s Boardia Chemicals Pvt Ltd.Ratlam, Madhya Pradesh- 457001	23.334655	74.977187	Sulphate, Chlorides, Aluminium, Heavy Metals, Phenolic compounds, PAH components
108.	M/s Union carbide (UCIL), J.P. Nagar, Bhopal, Madhya Pradesh	23.280833	77.410556	Pesticides (Organochlorine Carbamate and

	List of 1	195 Sites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants

	462001			chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
109.	Atal Ayub Nagar, Near UCIL factroy, Bhopal- 462001	23.28088	77.41183	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
110.	Solar Evaporation Ponds outside UCIL permises, Bhopal	23"17'7.26" N	77°24'43.5 5"E	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
111.	Kainchi Chhola colony, Bhopal- 462001	23,27844	77.41486	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
112.	Garib Nagar, Bhopal-462001	23.28573	77.41492	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
113.	Blue Moon & Nawab Colony, Bhopal-462001	23.28488	77.41096	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
114.	New Arif Nagar, Bhopal-462001	23.28388	77.40839	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
115.	Shiv nagar, near Hindustan petroleum depot, Bhopal462001	23.29052	77.4185	Pesticides (Organochlorine Carbamate and chlorinated benzene (HCB)), Mercury, VOC (Chloroform)
116.	Mandideep Industrial area, Mandideep, Raisan- 462040	23.083	77.531158	VOCs (not specified)
117.	M/S Beta Napthol-village Maksi, Shajapur dist 465106	23.246889	76.156033	Aluminium, Sulphate, Chlorides, Iron
118.	Vindhyachal Thermal Power Plant, Singrauli, Post Vindhyan nagar, Dist. Sangruli, MP-486885	24.098766	82.675866	SO2, NOx, SPM etc as air pollutants, Hg, As
	МАНА	RASHTRA (03 S	ites)	
119.	Deonar, Mumbai, Maharashtra 400088	19.070768	72.928172	Not Known

c 11-	City I assets	Lastenda	Laurituda	Tune of Contaminants
S. No.	Site Location	Latitude	Longitude	Type of Contaminants
120.	Tarapur Industrial area, Tarapur, Thana dist, 401504	19.788611	72.748333	Chromium
121.	Nashik, MIDC (Industries located in MIDC Area)	19.593245	73,424	Nitrate, Lead & Manganese, Inorganic salts
	OD	ISHA (09 Sites	)	
122.	Sukinda, Orissa-755018	20.96751	85.916321	Hexavalent Chromium
123.	Ash Pond Contaminated Sites of CPP, NALCO, Orissa, M/sNational Aluminum Co. Products, Angul 759122	20.87759	85.16908	Cadmium
124.	Brahamani Nandira River Polluted Sites, Angul-759122	20.8925	85.2425	Chromium
125.	Girang & Kulad Villages, NALCO, Angul-759122	20.8191	85.16019	Fluorides
126.	Kandsar & Karaberini Sites, NALCO, Angul-759122	20.85976	86.05569	Cadmium
127.	Koniabera Site, Angul-759122	20.85726	85.14436	Cadmium
128.	Tentulei Common Polluted Site, Angul-759122	20.9195	8517429	Fluorides
129.	Lanjigarh, Kalahandi-766027	19.709	83,3995	Copper, Lead, Zinc, VOCs (Trichloroethane, Trichloroethene, Vinylchloride), Aromatic Hydrocarbons (Xylene)
130.	Brajrajnagar, Ib Valley-768201	21.824028	83.913694	Lead, Cadmim, Nickel
	PU	NJAB (03 Sites	)	
131.	Kala Sanghia Drain, Jalandhar, Punjab-144623	31.35344	75.55695	Pesticides, Acidic Chemicals, Mercury, Lead, Zinc
132.	Ajnali Village, Mandi Gobindgarh, Punjab - 147301	30.65295	76.31013	Lead, Cadmium, Oil/fuel Hydrocarbons (TPH), Other Heavy Metals (from Coke, Fly Ash)
133.	Nasrali Village, Mandi Gobindgarh-147301	30.39004	76.1854	Arsenic
	RAJA	STHAN (11 Sit	es)	
134.	Jaitpur Village, Rohat Block, Pali, Rajasthan-306421	25.7732	73.3324	Arsenic
135.	Ramky waste management , Udaipur, Rajasthan 313004	24.570855	73.713455	Nickel, Chromium and Cadmium, Lead , Copper , Iron , Zinc
136.	Zawar Mines, Udaipur, Rajasthan 313901	24.3667	73.7167	Arsenic
137.	M/S Puransons, RIICO Industrial	28.201217	76.868799	Lead

	1			
S. No.	Site Location	Latitude	Longitude	Type of Contaminants
	Area, Bhiwadi, Alwar District, Rajasthan-301019			
138.	Malvia Nagar Industrial Area, Jaipur City, Rajasthan-302017	26.51314	75.4941	Chromium
139.	Bhilwara textile, Kothari river, Rajasthan- 311001	25.35	74.628	Chromium
140.	Mewar Industrial area, University New Campus Road, Udaipur, Rajasthan-313001	24.34523	73.44564	Lead, Copper, Nickel, Zinc
141.	Rajpur Dariba mines, District Rajasmand, Rajasthan-313324	24.57283	24.57283	Lead
142.	Sokarna village, Balotra, Rajasthan-344022	25.80539	72.26549	Asbestos, Aromatic Hydrocarbons (Benzene, Toluene), Benzidine, VOCs (Trichloroethene, Vinylchloride), Phenol, Chromium, Lead, Zinc,
	TAMI	L NADU (08 Sit	tes)	
143.	Peranampattu Pond Site, Vellore Tamilnadu-632001	12.92809	78.71429	Chromium
144.	Manali, Chennai, Tamil Nadu- 600068	13.17329	80.2962	Sulfur Dioxide
145.	Perumgudi, Chennai-600035	12.952621	80.228193	Nitrate, Silica, Chromium Nickel, Copper, Copper Cadmium, Zinc, Chloride, Sulphate
146.	Karunguri Village, Kancheepuram, Tamil Nadu- 631501	12.82	79.71	Lead
147.	Kancheepuram, Tamil Nadu- 631501	12.82	79.71	Lead
148.	Tirukalimedu Village, Kanchipuram,Tamil Nadu- 631501	12.82	79.72	Lead
149.	Walajapet Lake Water Polluted Site, Vellore, Tamilnadu-632513	12.92379	79.3569	Chromium
150.	Ranipet, Tamilnadu-632401	12.9501	79.30869	Chromium
	TELA	NGANA (07 Sit	es)	
151.	Musi River, Hyderabad - 500001, Telangana	17.2248	78.2921	PAH components, Chromium, Lead
152.	Asani kunta Lake, Medak district, Telangana - 502220	17.630861	78.346664	Not Known
153.	Maheshwaram, Hydrabad- 501506	17.933336	79.862988	Nickel, Cobolt, Cobber, Zink, Cadmium, Chromium, Lead

			In the state of th	T and the second second second second
5. No.	Site Location	Latitude	Longitude	Type of Contaminants
154.	Chevella Industrial Area Rangareddy District-501503	17.485929	78.443928	Nickel, Cobolt, Cobber, Zink, Cadmium, Chromium, Lead
155.	LB Nagar Industrial Area, Rangareddy District-501503	17.38701	78.485813	Nickel, Cobolt, Cobber, Zink, Cadmium, Chromium, Lead
156.	Moula Ali Industrial Area Rangareddy District-501503	17.38701	78.485813	Nickel, Cobolt, Cobber, Zink, Cadmium, Chromium, Lead
157.	Gundlapochampally Industrial Area Rangareddy District-501503	17.492928	78.442297	Nickel, Cobolt, Cobber, Zink, Cadmium, Chromium, Lead
	UTTAR	PRADESH (22	Sites)	
158.	Bhuapur Village, Kaushambhi, Gaziabad, Uttar Pradesh-201010	28.63711	77.32355	Hexavalent Chromium, Chromium
159.	Village-Devri, Tehsil Billari Dist. Moradabad (U.P.) 244001	28.5513	78.79333	Lead
160.	Karula Nala (Drain), Moradabad, Uttar Pradesh Pin 244001	28.81124	78.76695	Chromium
161.	Motipur Village, Chakeri Ward, Near Jajmau Industrial Area, Kanpur-208010	26.39678	80.43953	Hexavalent Chromium
162.	Bharat Oil and Waste Management, Kanpur-208024	26.377107	79.95575	Not Known
163.	Jajmau Industrial Area, Kanpur, Uttar Pradesh-208010	26.40911	80.44404	Chromium, Barium, Copper, Lead, Strontium, Vanedium, Zinc
164.	Rooma-Treatment Storage Disposal Facility, Kanpur-208001	28.63711	80.35	Hexavalent Chromium, Chromium, Arsenic, Cadmium
165.	Wajidpur, Kanpur, Uttar Pradesh- 208010	26.42332	80.41907	Hexavalent Chromium, Chromium
166.	Magarwara Industrial Area, Unnao, Uttar Pradesh	26.55	80.48	Chromium, Barium, Copper, Lead, Strontium, Vanedium, Zino
167.	Shivnagar Colony, Unnao- 209862	26.55323	80.50761	Chromium, Arsenic, Fluoride
168.	Hindustan Laboratories, UPSIDC, Industrial Area, Naini, Allahabad- 211008	25.37108	81.858742	Not Known
169.	Ashapur Village, Fatehpur- 212631	26.2	80.54	Chromium
170.	Gudhrauly Village, Fatehpur- 212601			Chromium
171.	Ranipur Village, Fatehpur pincode-212641	26.2	80.54	Chromium

S. No.	Site Location	Latitude	Longitude	Type of Contaminants
172,	Babusarai, District Bhadohi-Uttar Pradesh - 221314	28.54702	77.18938	Hexavalent Chromium, Chromium, Arsenic, Cadmium
173.	Chetwa, Meorpur block, District Sonebhadra, Uttar Pradesh - 231208	24.06522	82.42131	Mercury
174.	Kunrwa, Jirgha Dandi, Sonebhadra District, Uttar Pradesh-231208	24.09503	83.0549	Fluoride
175.	Murdhawa Industrial Area, P.O. Renukoot, Dist. Sonebhadra, Uttar Pradesh 231 217	24,13415	83.02426	Mercury
176.	Singrauli Super Thermal Power Plant, Singrauli	24.102683	82.706324	Lead, Chromium, Cadmium, Mercury
177.	Jalapur Chooiya, Bijnor district, Uttar Pradesh- 246701	29.35655	78.1713	Other
178.	Chadenamal Village, Block Thana Bhawan, District Muzaffarnagar- 251001	29.65642	77.45677	Chromium, Cadmium, Pesticides
179.	Dabal Village, Muzaffarnagar district, Uttar Pradesh-251001	29.29062	77.633677	Chromium
	UTTAR	AKHAND (08 S	ites)	
180.	Kashipur area distt US Nagar Uttarakhand-244713	29.19907	78.961724	Not Known
181.	Moradabad Road , Kashipur Distt US Nagar, Uttarakhand-244713	28.984258	79.474495	Not Known
182.	Ramnagar Industrial Area and its adjoining area, Uttarakhand- 244715	29.396351	79.130084	Not Known
183.	Jasodhar Industrial area, Distt pauri-246149	30.151213	78.769424	Not Known
184.	Village-Tansipur, Roorkee, Uttarakhand-247656	29.822435	77.853797	Cadmium, Chromium
185.	Selaqui Industrial Area, Dehradun, Uttarakhand pincode 248197	30.18513	78.00378	Mercury
186.	Sansarpur Village, Chutmulpur Road, Saharanpur, Uttarakhand Pincode-247551	30.12428	77.65534	Chromium, Iron, Manganese, Copper, Lead Cadmium
187.	Lalkaun Area distt Nanital, Uttarakhand-262402	29.08	79.52	Barium, Zinc, Dichloorbenzene, Pentachloorphenol, VOCs (Trichloroethane, Trichloo methane)

WEST BENGAL (08 Sites)

88.374617

Industrial

Hindustan Heavy Chemicals,

Kardah, 19,BT ROAD,

188.

List of 195 Sites Yet to be Assessed

Mercury

	List of 1	195 Sites Yet to be	Assessed	
S. No.	Site Location	Latitude	Longitude	Type of Contaminants

	KHARDAH,KOLKATA-700116			
189.	Howrah, West Bengal-711101	22.650751	88.265831	Chromium
190.	Calcutta Chemical Products, Dankuni Durgapur road,vill Dankuni,DistHoogly-712310	22.706641	88.282848	Aromatic Hydrocarbon
191.	Bandel Thermal Power Station (BTPS), Hooghly District, West Bengal-712123	22.5995	88.2413	Pesticides
192.	Durgapur Chemicals Ltd., Durgapur, West Bengal-713201	23.506708	87.285935	Mercury
193.	Durgapur Napthelene, WEST BENGAL-713201	23.506652	87.345501	Aromatic Hydrocarbon
194.	Belda Chemicals, villKharagpur (Mednipur) West Bengal-721301	22.08858	87.34939	Aromatic Hydrocarbon
195.	Kolaghat thermal power plant, Midnapore district, West Bengal- 721301	22.414693	87.864557	Uranium, Cadmium, Zinc, Rubidium, Strontium, Zirconium, Lead, Barium, Scandium

\*\*\*