

**CHAPTER**

**6**



# Monitoring of projects in Critically Polluted Areas

## 6.1 Introduction

CPCB in collaboration with Indian Institute of Technology, Delhi, (IIT) had carried out comprehensive environmental assessment in 88 prominent industrial clusters during 2009-10 based on the Comprehensive Environmental Pollution Index (CEPI)<sup>26</sup> criteria. Out of these 88 industrial clusters, 43 industrial clusters with CEPI score 70 and above on a scale of 0 to 100 were identified as Critically Polluted Areas (CPAs). We selected a sample of 352 projects granted EC during 2008-12, out of which 22 projects pertained to CPAs in 16 States. Audit findings with regards to CPAs are as under:

## 6.2 Imposition of Moratorium

During the period 2010-2014, MoEF&CC/CPCB took the following actions to restore the environmental quality in 43 CPAs:

1. MoEF&CC imposed (January 2010) a moratorium on grant of EC for projects in all the 43 CPAs. In September 2013, MoEF&CC permitted projects / activities of modernization of existing project or activity not resulting in increase in pollution load and physical infrastructure like highways, aerial ropeways, Common Effluent Treatment Plants and Common Solid Waste Management Facility in the CPAs where moratorium was in-force. While imposing moratorium, MoEF&CC defined the potential impact zones in the industrial clusters.
2. CPCB carried out environmental quality monitoring during 2011 and 2013 and CEPI was assessed based on the recorded monitoring data in the 43 CPAs. Meanwhile, during October 2010 to September 2013, MoEF&CC decided to lift the moratorium on the basis of statements furnished by SPCBs, to the effect that some ground work had been initiated in line with the submitted action plans. Accordingly, the moratorium was lifted from 26 CPAs as detailed in Table 6.1.

---

<sup>26</sup> CEPI is a rational number to characterize the environmental quality at a given location following the algorithm of source, pathway and receptor.

**Table 6.1: Details of lifting of moratorium**

Date of lifting of moratorium	CPAs
<b>26 Oct 2010</b>	Patancheru-Bollaram - Andhra Pradesh, Mandi Govindgarh -Punjab, Vapi - Gujarat, Coimbatore – Tamil Nadu and Tarapur –Maharashtra
<b>15 Feb 2011</b>	Navi Mumbai, Dombivali and Aurangabad - Maharashtra, Ludhiana – Punjab, Agra and Varanasi - Mirzapur- Uttar Pradesh, Cuddalore-Tamil Nadu and Bhavnagar-Gujarat
<b>31 Mar 2011</b>	Indore –Madhya Pradesh, Angul-Talcher - Odisha , Faridabad and Panipat – Haryana, Ghaziabad and Noida –Uttar Pradesh, Junagadh -Gujarat
<b>23 May 2011</b>	Bhadravati and Mangalore -Karnataka, Greater Kochi-Kerala
<b>05 July 2011</b>	Ib Valley, Jharsuguda –Odisha, Singrauli –Uttar Pradesh and Madhya Pradesh part
<b>17 Sept 2013</b>	Kanpur- Uttar Pradesh, Asansole, Haldia and Howrah- West Bengal, Dhanbad-Jharkhand, Korba-Chhattisgarh, Ahmedabad-Gujarat, Visakhapatnam- Andhra Pradesh, Manali- Tamil Nadu and Bhiwadi- Rajasthan

Subsequently, in September 2013, MoEF&CC lifted the moratorium in 10 more CPAs and also re-imposed the moratorium in eight CPAs namely Ghaziabad (UP), Indore (MP), Jharsuguda (Odisha), Ludhiana (Punjab), Panipat (Haryana), Pattancheru-Bollaram (AP), Singrauli (MP and UP) and Vapi (Gujarat). However, in June 2014, the re-imposition of moratorium on these eight CPAs was kept in abeyance.

3. MoEF&CC directed (September 2013) CPCB to undertake environmental quality monitoring in CPAs through a third party on biennial basis (once in two years) for computing CEPI.

We observed that CPCB did not finalise the firms through which the environment quality monitoring was to be done till May 2016, although the work was to be completed in the year 2015. Thus, the increase or decrease in CEPI score could not be assessed within time frame of two years in the CPAs.

Further, the imposing of moratorium in CPAs having CEPI score of 70 or more and lifting of moratorium in CPAs with CEPI score of less than 70 also remained unassessed. CPCB stated (May 2016) that the environmental quality monitoring in 43 CPAs would be undertaken by CPCB during 2016-17.

While accepting the audit observation, MoEF&CC stated (October 2016) that due to paucity of funds and other administrative difficulties, the third party monitoring could not be performed by CPCB in 2015. The finalization of zone wise monitoring agency was in process and CEPI score was expected to be evaluated in 2016-17.

### 6.3 Preparation of action plans

Our scrutiny revealed that out of 16 States where CPAs fall, the SPCBs of 12 States (Andhra Pradesh, Chhattisgarh, Haryana, Kerala, Karnataka, Madhya Pradesh, Odisha, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal) prepared the Action Plans. In three States (Gujarat, Jharkhand and Maharashtra) the position of preparation of action plan could not be ascertained. In case of Delhi, it was stated to be 'not applicable' although Nazafgarh Drain Basin including Anand Parvat, Naraina, Okhla and Wazirpur were identified as CPA by CPCB.

MoEF&CC (October 2016) accepted the audit observation stated that the action plan of Nazafgarh Drain Basin, Delhi was in the draft stage.

#### **6.4 Display of approved action plan on the websites of SPCBs/UTPCC**

Scrutiny of records revealed that out of 16 States, only in five States (Andhra Pradesh, Chhattisgarh, Karnataka, Odisha and Punjab) the action plans were displayed on the website of the SPCBs whereas in six States (Jharkhand, Haryana, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal) action plans were not displayed on the website of the SPCBs.

No information provided by SPCBs of four States (Delhi, Gujarat, Kerala, and Maharashtra).

While accepting audit observation, MoEF&CC stated (October 2016) that all the 16 SPCBs have been directed to upload the action plan on their websites.

#### **6.5 Non monitoring of implementation of action plan**

In nine States (Andhra Pradesh, Chhattisgarh, Kerala, Odisha, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and West Bengal) the implementation of action plan was monitored by SPCBs where as it was not monitored in six States (Gujarat, Haryana, Jharkhand, Karnataka, Maharashtra and Uttar Pradesh) by SPCBs and in case of Delhi, it was stated as not applicable.

While accepting audit observation, MoEF&CC stated (October 2016) stated that the local level committees in 35 CPAs have been constituted for monitoring the implementation of action plans. In respect of remaining eight CPAs, the committees have not been formed and SPCBs were monitoring the progress.

Illustrative cases of lack of implementation of action plan in Punjab and Chhattisgarh are given below:

In case of Ludhiana CPA, it was observed that sewer lines were not completed, scattered dairies which had to be shifted upto December 2010 were not shifted and biogas plant was also to be constructed. The Municipal Corporation of Ludhiana was to install integrated municipal solid waste management facility by 31 March 2014, however, the solid waste was being collected in only 40 *per cent* of the city. Common Effluent Treatment Plants (CETP) for Dyeing industries were to be installed, which was not done. The CEPI was 81.66 when moratorium was imposed (February 2011). However, as per CPCB, the CEPI was 75.72 and 63.35 during 2013 and 2014 which showed a decreasing trend. The CEPI for the current year was not available.

**Dairy waste discharge at Budha Nallah, Ludhiana, Punjab**



Similarly, in case of **Mandi Gobindgarh CPA**, the ETPs were not installed. The industries located in non-designated area were required to be shifted; however, it was not done. The CEPI of **Mandi Gobindgarh** was 75.08 in 2010; current level of CEPI was not available.

MoEF&CC stated (October 2016) that the implementation of action plans was in progress, laying of sewer, etc. was not within mandate of CPCB/SPCBs. The reply was silent on the installation of municipal solid waste management facility and installation of CETPs for Dyeing industries. In case of **Mandi Gobindgarh**, it stated that implementation of action plan was in progress and all the industries have installed ETPs. However, fact remains that the industries located in non-designated areas were not shifted.

In case of **Korba CPA**, Chhattisgarh Environment Conservation Board, along with CPCB, prepared a remedial action plan called Korba Action Plan. The status of remedial action suggested and its achievement as on January 2015 is given in Table 6.2.

**Table 6.2: Status of non-installation of Electro Static Precipitator (ESP) by power plants**

Name of Industry	Target date	Status on January 2015
1. Korba Super Thermal Power Station, M/s NTPC Ltd, Jamnipali, Korba (2600 MW)	October 2009; revised to February 2016	Work order issued in December 2012, work not yet completed.
2. Hasdeo Thermal Power Station, M/s CSEB, Korba (West), Korba (840 MW)	October 2009; revised to December 2015	Detailed proposal yet to be submitted.
3. Korba Thermal Power Station, M/s CSEB, Korba (East), Korba (440 MW)	October 2009; revised to December 2011	No proposal submitted for upgradation.
4. Bharat Aluminum Company Limited, M/s Balco captive power plant, Jamnipali (270 MW)	October 2009; revised to August 2015	Upgradation work was stated to be in progress.

The above table shows that though industries took steps to control the environment pollution, none of the industries had installed the ESPs essential for reducing quantum of the particulate matter causing air pollution.

We also noticed that the power plants were required to ensure 100 *per cent* utilisation of the fly ash generated by the plants, however no industry achieved the target, as their fly ash utilisation ranged between nine and 56 *per cent* in 2014. **M/s Bharat Aluminum Co Ltd, Korba (Aluminum Smelter plant)** was required to ensure Spent Pot Liner<sup>27</sup> utilisation, treatment and recovery of Aluminum Fluoride and was to install Continuous Ambient Air Quality Monitoring Station (CAAQMS) by December 2011; however, the industry did not comply with the same.

Further, Municipal Corporation and Chhattisgarh State Power Generation Company, Korba failed to install the Sewerage Treatment Plant (STP) due to which the entire untreated waste was discharged into the Hasdeo River causing water pollution. **South Eastern Coal Fields Ltd (SECL), Korba** was required to set up the coal washeries by December 2012, but this was not done by the industry despite lapse of more than three years. The industries had also not set up the CAAQMS stations in desired quantity to monitor the quality of air in Korba city.

The MoEF&CC stated (October 2016) that ESPs have been installed in all the TPPs since their inception. The renovation of ESPs was continuous process and takes place from time to time depending on the availability of funds. It further stated that except CSEB(East) the renovation work of ESPs had been either completed or was in progress. Regarding utilization of fly ash it stated that in Korba it was around upto 60 *per cent* and directions were issued by Ministry for 100 *per cent* utilization.

#### 6.6 Non submission of the monitoring report to CPCB

SPCBs were to submit yearly monitoring report of CPAs to CPCB. Our scrutiny revealed that during 2011 to 2015, eight States (Andhra Pradesh, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Odisha, Tamil Nadu and West Bengal) submitted the monitoring reports to CPCB regularly whereas seven States (Chhattisgarh, Delhi, Gujarat, Haryana, Jharkhand, Kerala and Maharashtra) did not submit the monitoring report to CPCB. In case of Uttar Pradesh, the reports were submitted intermittently.

Only six States (Andhra Pradesh, Karnataka, Madhya Pradesh, Punjab, Tamil Nadu and Uttar Pradesh) brought the increase in pollution level into the notice of CPCB as well as MoEF&CC, while the other States did not monitor the pollution level.

#### 6.7 Non Monitoring of the implementation of action plan by the third party

The concerned SPCBs were directed by CPCB (April 2016) to conduct the third party monitoring bi-annually. The third party monitoring was done by five States (Andhra Pradesh, Madhya Pradesh, Odisha, Punjab and West Bengal) and in case of Karnataka, one project i.e. MRPL was monitored out of two projects. In remaining 10 States, monitoring of implementation of action plan by the third party was not done.

<sup>27</sup> Technology that treats and stabilizes the waste (rendering the waste harmless) and enables landfilling of the stabilized waste and making products out of the waste.

While accepting the audit observation, MoEF&CC stated (October 2016) that all the SPCBs had been directed to undertake the third party monitoring in CPAs on regular basis.

### **6.8 Conclusion**

MoEF&CC/CPCB had not undertaken environmental quality monitoring in all the 43 CPAs due to non-finalization of the firms for the same. SPCBs/UTPCCs did not display the action plans approved by the CPCB on their websites. SPCBs/UTPCCs did not monitor the implementation of action plans. Monitoring of the implementation action plan by the third party was also not undertaken by the SPCBs/UTPCCs.

### **6.9 Recommendation**

We recommend that,

- i. MoEF&CC may issue advisory to the State Government regarding implementation and monitoring of the action plan of critically polluted areas at regular intervals.

(Paragraph 6.3)