



सत्यमेव जयते

# **Report of the Comptroller and Auditor General of India on Environmental Clearance and Post Clearance Monitoring**



**Union Government**  
**Ministry of Environment, Forest and Climate Change**  
Report No. 39 of 2016  
(Performance Audit)



Proposed Hotel and Bar restaurant coming up within OMAXE Riveria Infrastructure, Rudrapur, Uttarakhand



Metropolitan Mall, Jalandhar, Punjab

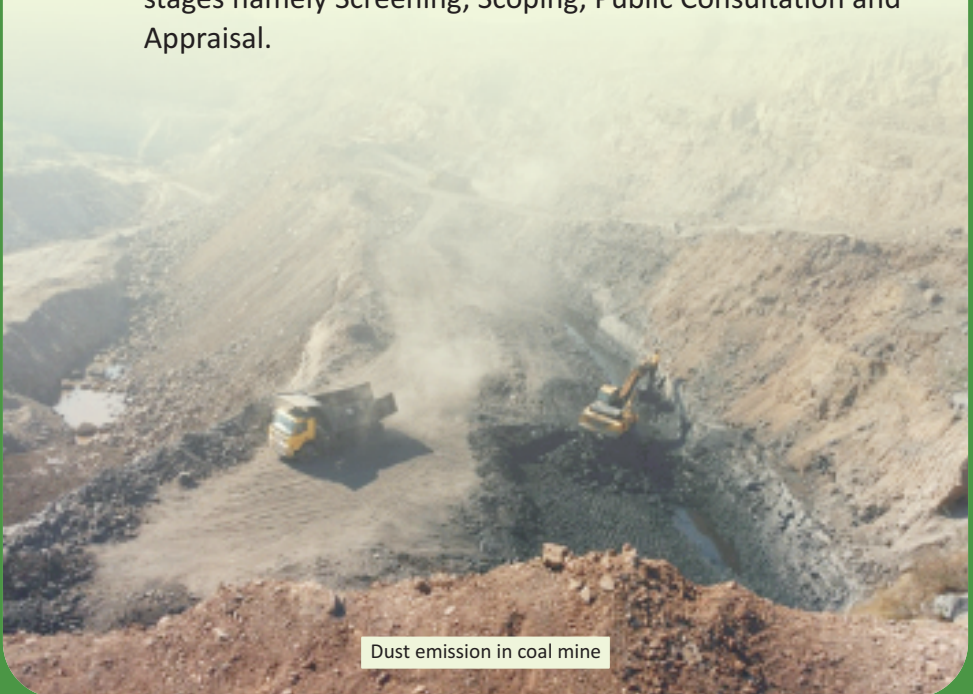
## Background

- Article 48 A of the Constitution of India brings out that the State shall endeavor to protect and improve the environment and to safeguard the forests and wildlife in the country. Article 51 A(g) enjoins upon the citizens of India to protect and improve the natural environment including forests, lakes and rivers and wildlife and to have compassion for living creatures.
- The impact of efforts to achieve rapid economic growth and development and continuing pressures of demand generated by those sections of society who are economically more advanced and impose great strain on the supply of natural resources, has been recognized as one of the environmental problems in India.
- The Ministry of Environment, Forest and Climate Change (MoEF&CC) is the nodal agency for the planning, promotion, co-ordination and overseeing of the implementation of India's environmental and forestry policies and programmes.
- The Performance Audit on 'Environmental Clearance and Post Clearance Monitoring' for the year ended March 2016 has been prepared for submission to the President of India under Article 151 of the Constitution of India.
- The booklet abstracts the salient audit findings and related recommendations contained in the Audit Report.
- The CD contains the complete Report of the Comptroller and Auditor General of India in English and Hindi.

Coal stock without garland drain and water sprinklers

## Environment Impact Assessment and Environmental Clearance

- Environment Impact Assessment (EIA) is a process used to identify the environmental impacts of a project prior to its approval. EIA systematically examines both beneficial and adverse consequences of the proposed project and ensures that the environmental impact and the mitigation measures are taken into account during the project design.
- MoEF&CC made EIA and Environmental Clearance (EC) mandatory for certain development projects through its notification of January 1994, which was revised in September 2006.
- The process of granting EC for the projects comprises of four stages namely Screening, Scoping, Public Consultation and Appraisal.



Dust emission in coal mine





## What were our Audit Objectives?

Performance Audit on "Environmental Clearance and Post Environmental Clearance Monitoring" sought to examine whether:

1. the process of grant of EC is in compliance with the laid down procedure, is adequate, fair and transparent.
2. there is adequate Post Environmental Clearance Monitoring to ensure that the project proponents comply with all the conditions laid down in the EC letter and commitments made in the EIA report.



## Audit Scope and Methodology

The EIA notification issued by MoEF&CC in 2006 identified 39 different types of developmental projects and activities, grouped into eight sectors. These eight sectors are (1) River Valley and Hydroelectric Projects, (2) Nuclear Power Projects, (3) Thermal Power Projects, (4) Coal Mining, (5) Non coal Mining, (6) Infrastructure, (7) Construction and (8) Industry. The scope of our audit was as follows:

- i. With reference to Audit Objective 1, we covered projects that were granted EC by MoEF&CC between January 2011-July 2015 in all sectors except Nuclear Power Projects.
- ii. With reference to Audit Objective 2, we covered projects that were granted EC by MoEF&CC between calendar years 2008-2012 in all sectors except Nuclear Power Projects.

Audit Objective 1, we sampled 216 projects which had been granted Environmental Clearance between calendar years 2011 to July 2015 to examine the process of grant of Terms of Reference and Environmental Clearance at the Ministry.

Audit Objective 2, we selected 352 projects year wise, State/UT wise and sector wise based on stratified judgement sampling. Since, a project takes four to five years for operationalisation, therefore, in respect of examination of Audit Objective 2, the projects granted EC during the time frame 2008 to 2012 have been sampled. These also include 22 projects in critically polluting areas in 16 States.

Emissions seen from the stack

## Audit Scope and Methodology

The field audits covered MoEF&CC 33 selected States/UTs. These States/UTs were Andhra Pradesh, Assam, Andaman & Nicobar Islands, Bihar, Chandigarh, Chhattisgarh, Dadra & Nagar Haveli, Daman & Diu, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Odisha, Puducherry, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttarakhand, Uttar Pradesh and West Bengal.

We examined records in MoEF&CC including its 10 Regional Offices (ROs), Central Pollution Control Board (CPCB) and 33 State Pollution Control Boards (SPCBs)/ Union Territory Pollution Control Committees (UTPCCs). We also examined compliance reports submitted by the Project Proponents (PPs) to MoEF&CC and the ROs of MoEF&CC. Joint site visits were carried out along with officials of SPCBs/UTPCCs. During the site visit, we test checked the records furnished by the PPs in relation to EIA and compliance to EC.



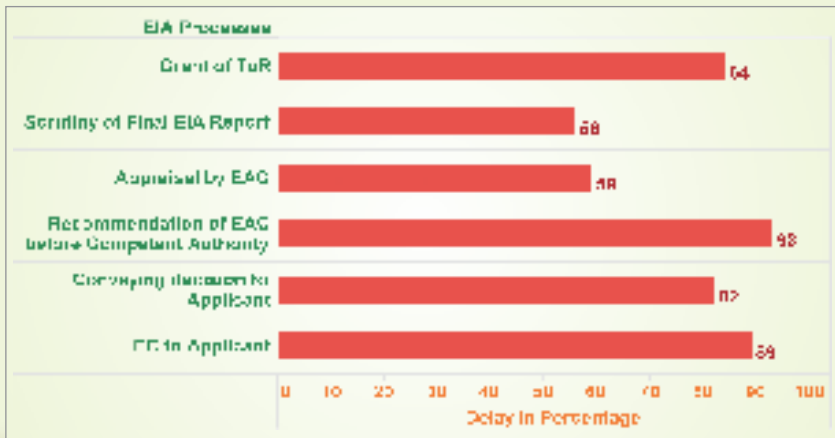
Digging beyond the permissible limit



## The Performance Audit Findings

### Process of grant of EC

We scrutinised 216 projects relating to seven sectors which were granted EC between 2011-2015. The percentages of delay in various EIA processes is given in Chart below.



Transportation of soil in open truck

## Audit findings in respect of EIA Process

Audit findings in respect of EIA Process are depicted in Chart below:



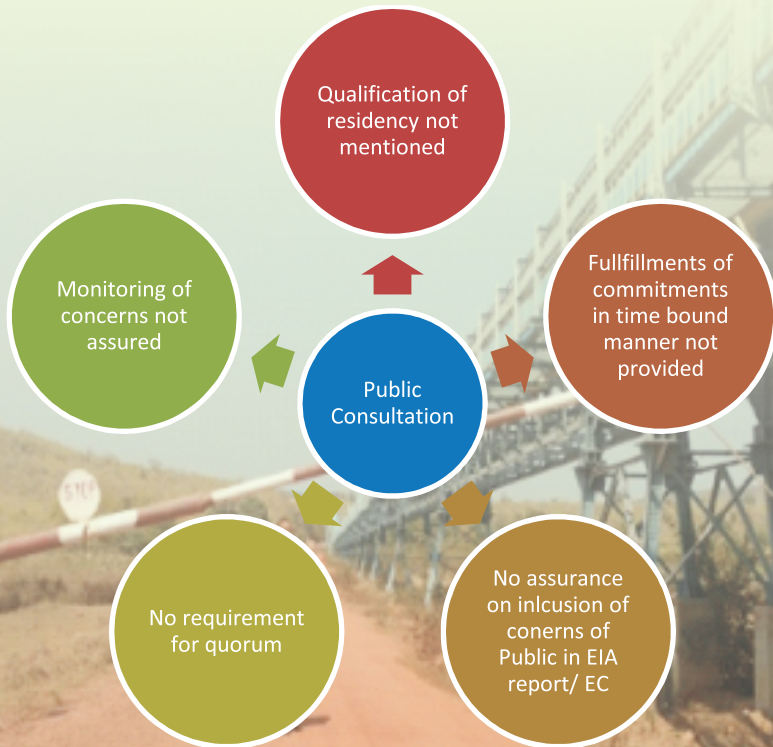
- There were delays at each stage of the EC process namely granting of Terms of Reference (ToR), scrutiny of final EIA Report, appraisal of the application by the Expert Appraisal Committee (EAC), placing recommendations of the EAC before the Competent Authority for a final decision and conveying recommendations of EAC and the decision of the MoEF&CC to the applicant.

- There were cases of non-compliance of EIA reports with ToRs and non-conformity of EIA reports with the Generic structure as prescribed in the EIA Notification. Other inadequacies noticed were EIA reports framed on baseline data collected before grant of ToR.
- PPs had not indicated that they had carried out cumulative studies in the EIA reports, therefore, assurance could not be derived on cumulative effect of existing and planned activities on the environment.
- MoEF&CC had issued a large number of Office Memorandums (OMs) relating to EIA notification. Some of these OMs had the effect of diluting the provisions of original notification. ECs were granted to the PPs without checking the compliance of the conditions mentioned in the previous ECs. There was also non-uniformity in EC conditions in similar kind of projects.
- MoEF&CC did not compile information about closed/non-operational projects which indicated poor coordination among MoEF&CC, SPCBs/UTPCCs and PPs.
- EIA reports were prepared by the consultants whose accreditation were provisional or not complete.
- A National Regulator to carry out an independent, objective and transparent appraisal and approval of the projects and also to monitor the implementation of the conditions laid down in the ECs was yet to be appointed by MoEF&CC.

Dust emission in coal mine

## Audit findings in conduct of Public Consultation

The audit findings in conduct of Public Consultation are depicted in Chart below:



Mechanism to ensure redressal of the concerns of the public in the final EIA report/EC letter and implementation of the commitments made by the PP during public consultation in a time bound manner were also not firmly in place. Besides, shortcomings were noticed in the conduct of public hearings.

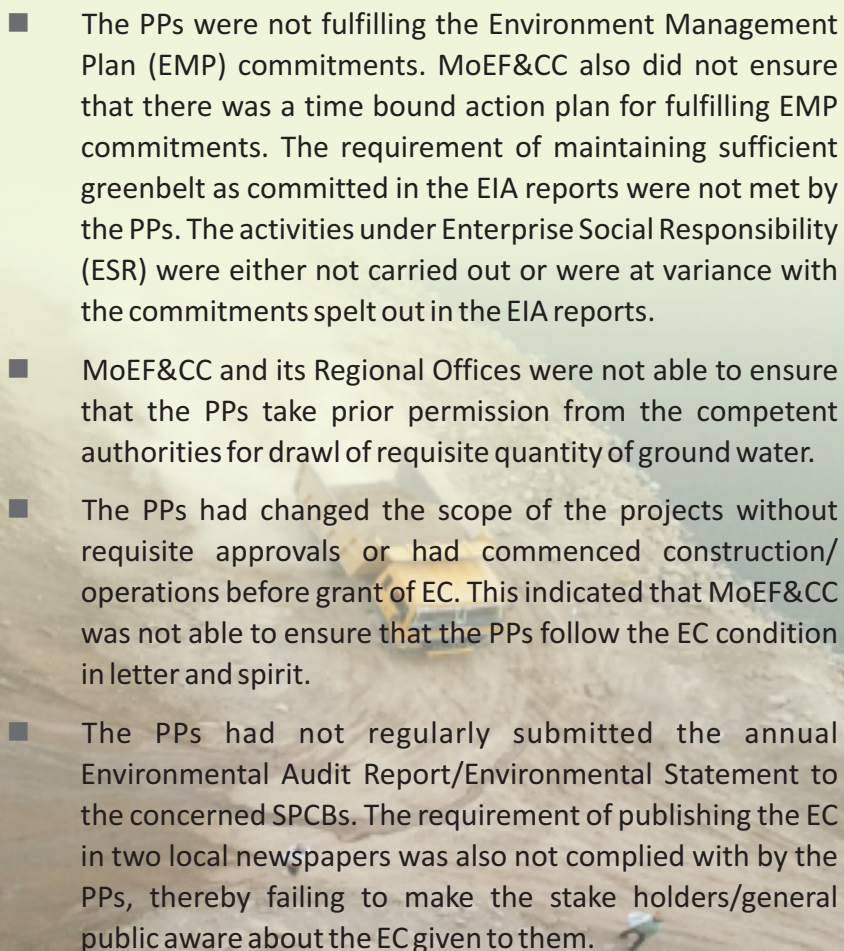
No plantation on both side of conveyor belt



## Audit findings in respect of compliance to general EC conditions

In order to assess whether PPs complied with the EC conditions, we examined records/information furnished by the PPs relating to 352 projects that were granted ECs by MoEF&CC between calendar years 2008-2012 in seven sectors. The audit findings in respect of compliance to general EC conditions are depicted in Chart below:



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- The PPs were not fulfilling the Environment Management Plan (EMP) commitments. MoEF&CC also did not ensure that there was a time bound action plan for fulfilling EMP commitments. The requirement of maintaining sufficient greenbelt as committed in the EIA reports were not met by the PPs. The activities under Enterprise Social Responsibility (ESR) were either not carried out or were at variance with the commitments spelt out in the EIA reports.
  - MoEF&CC and its Regional Offices were not able to ensure that the PPs take prior permission from the competent authorities for drawl of requisite quantity of ground water.
  - The PPs had changed the scope of the projects without requisite approvals or had commenced construction/operations before grant of EC. This indicated that MoEF&CC was not able to ensure that the PPs follow the EC condition in letter and spirit.
  - The PPs had not regularly submitted the annual Environmental Audit Report/Environmental Statement to the concerned SPCBs. The requirement of publishing the EC in two local newspapers was also not complied with by the PPs, thereby failing to make the stake holders/general public aware about the EC given to them.

Transportation of soil in open truck

Dumping site at Lingdok, Sikkim



Muck dumping site at Dikchu, Sikkim

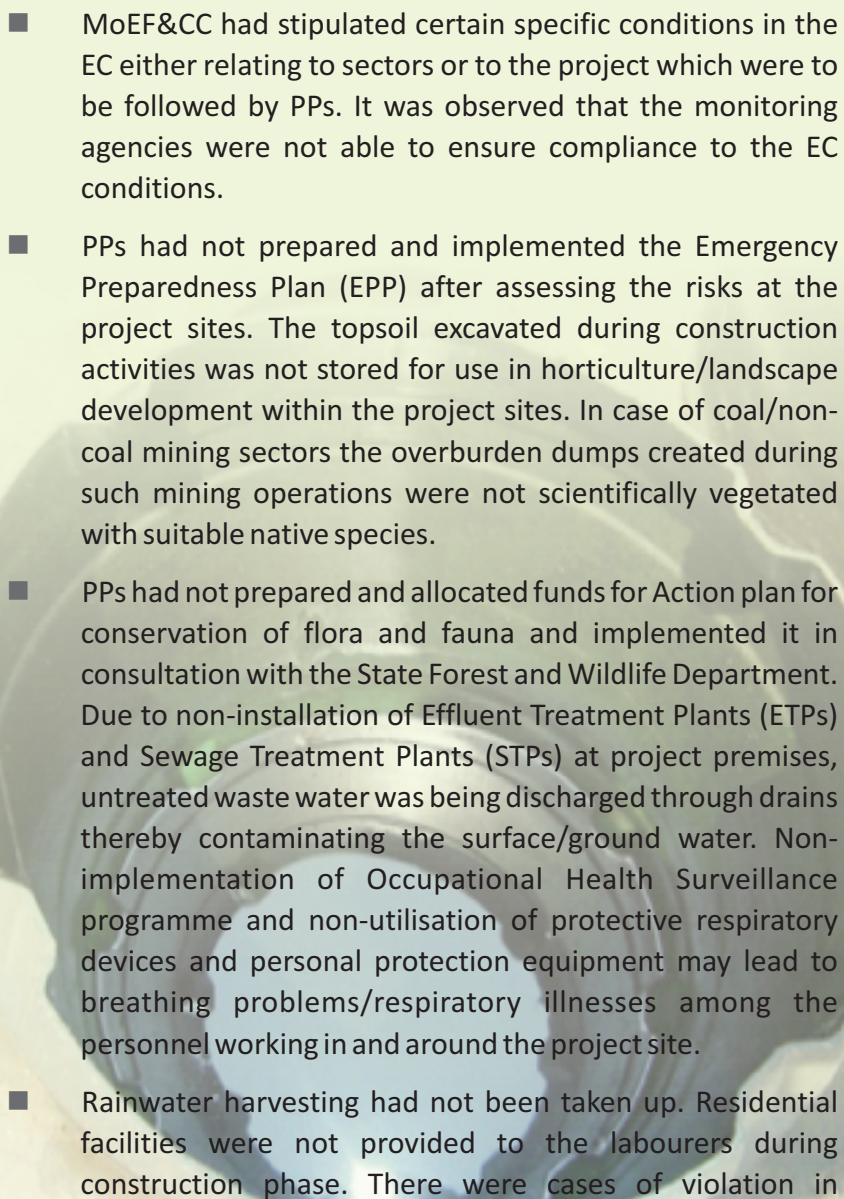
## Audit findings in respect of compliance to specific EC conditions

The audit findings in respect of compliance to 18 specific EC conditions are depicted in Chart below:



Area without greenbelt



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- MoEF&CC had stipulated certain specific conditions in the EC either relating to sectors or to the project which were to be followed by PPs. It was observed that the monitoring agencies were not able to ensure compliance to the EC conditions.
  - PPs had not prepared and implemented the Emergency Preparedness Plan (EPP) after assessing the risks at the project sites. The topsoil excavated during construction activities was not stored for use in horticulture/landscape development within the project sites. In case of coal/non-coal mining sectors the overburden dumps created during such mining operations were not scientifically vegetated with suitable native species.
  - PPs had not prepared and allocated funds for Action plan for conservation of flora and fauna and implemented it in consultation with the State Forest and Wildlife Department. Due to non-installation of Effluent Treatment Plants (ETPs) and Sewage Treatment Plants (STPs) at project premises, untreated waste water was being discharged through drains thereby contaminating the surface/ground water. Non-implementation of Occupational Health Surveillance programme and non-utilisation of protective respiratory devices and personal protection equipment may lead to breathing problems/respiratory illnesses among the personnel working in and around the project site.
  - Rainwater harvesting had not been taken up. Residential facilities were not provided to the labourers during construction phase. There were cases of violation in

Burnt oil lying in open area

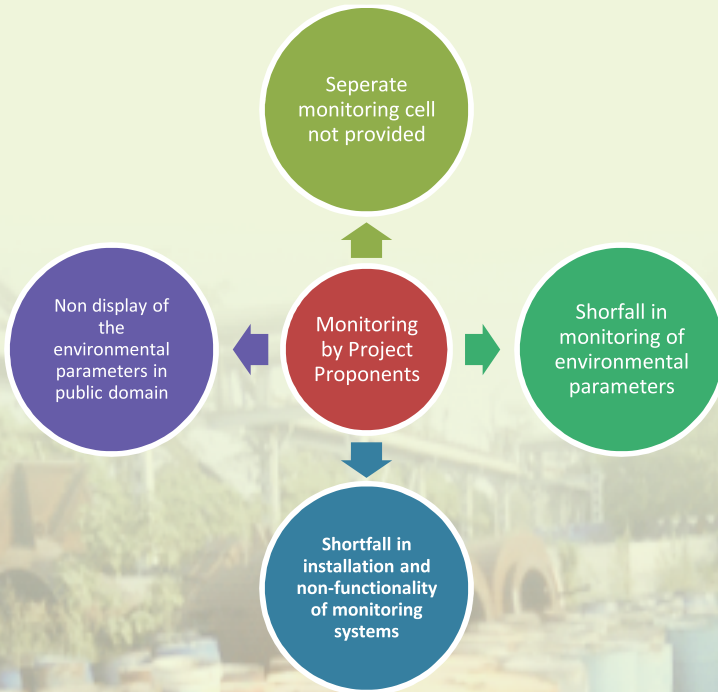
handling of hazardous waste materials by the PPs which lead to contamination of water courses and dump sites and prior permission from the concerned authority was not taken for handling of explosive material. Relief and Rehabilitation plan was either not implemented or partially implemented.

- In Thermal Power Plants, environmentally safe practices of storage of fly ash were not adhered to, coal of more than permitted ash content was being used, fugitive emission of fly ash was not properly controlled and the fly ash generated was not being fully utilised as per the EC conditions.
- In River Valley and Hydro Electric power projects, consolidation and compilation of the muck at the designated dumping sites and proper disposal of the muck was not being done, minimum environmental flow of discharge was not being maintained, Fishery Conservation and Management plan and Catchment Area Treatment Plans were not being implemented.



Digging beyond the permissible limit.

## Issued in monitoring by Project Proponents



- EIA / EMP reports and EC conditions provide tools for compliance of various environmental parameters by PPs. Inspite of the conditions mentioned in the EC, the PPs showed poor monitoring of environmental parameters.
- There was lack of compliance with regard to deployment of sufficient manpower, installation of necessary infrastructure and engagement of third party agencies for independent monitoring.
- The information regarding the environmental data was also not displayed at the project sites.

Hazardous material like used oil drum lying in open area

## Monitoring of projects in Critically Polluted Areas

- MoEF&CC/CPCB had not undertaken environmental quality monitoring in all the 43 Critically Polluted Areas (CPA)s 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.

## Post Environmental Clearance Monitoring by Regional Offices

- ROs were not ensuring that the PPs submitted half yearly compliance reports timely and regularly. PPs were also not uploading half yearly compliance report on their website.
- There was wide gap between the sanctioned strength vis a vis men in position of scientists in all the ROs. Consequently, MoEF&CC/ROs would not be able to monitor all projects under their jurisdiction even in a period of five years.

No power was delegated to ROs to take action against the defaulting PPs and they had to report the violations of the EC conditions to the Ministry.

The Ministry did not have a database of cases received where the violations were reported by ROs.

No penalty was imposed by the MoEF&CC for violating conditions of EC in the last two years.

Ash being dumped in the field outside project area



The audit findings in respect of ROs is depicted in Chart below.



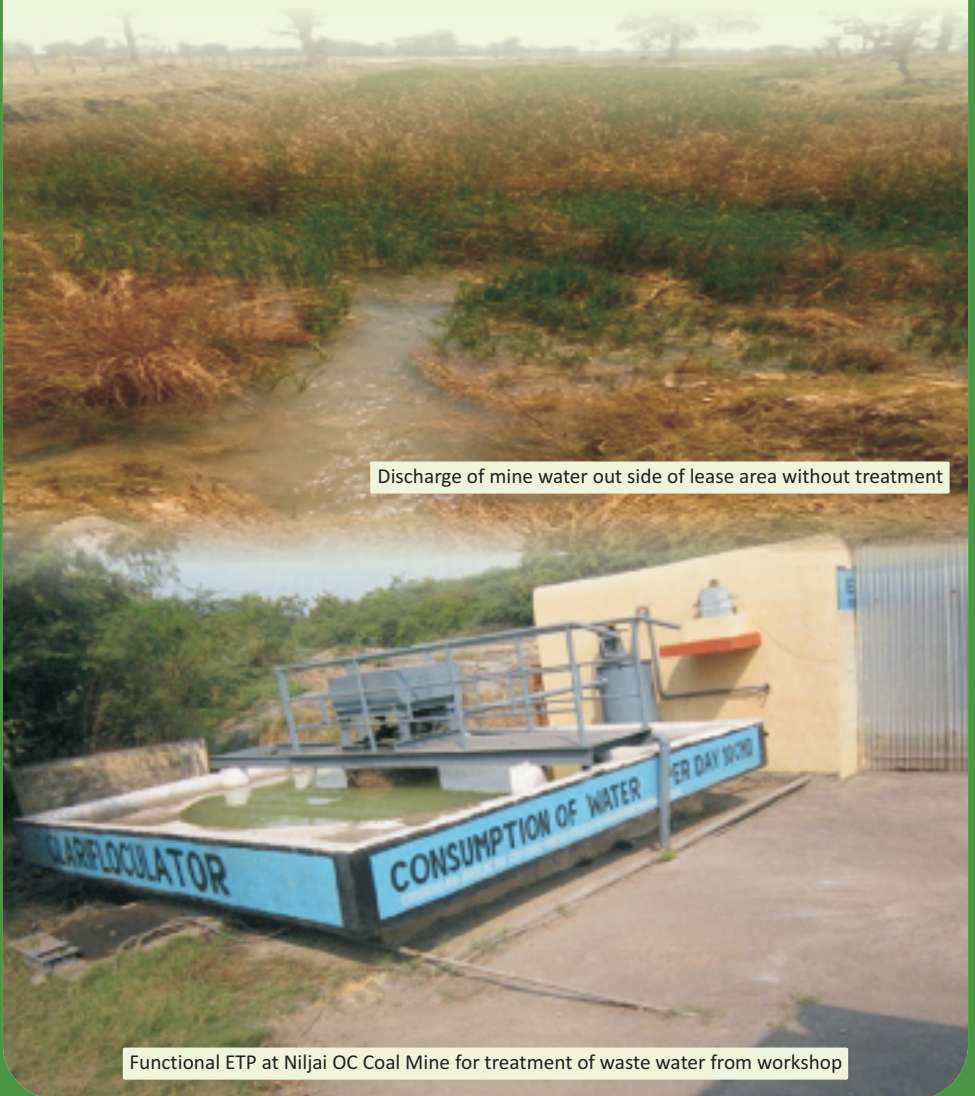
## Audit findings in respect of Monitoring by State Pollution Control Boards and Regional Offices



- SPCBs/UTPCCs had not been carrying out post EC monitoring due to lack of clear cut responsibility assigned to them under EIA Notification 2006. Therefore, compliance to various mitigation measures proposed by the PPs in the EIA/EC were not checked by SPCBs.

Fugitive dust without sprinkling of water

- SPCBs/UTPCCs were not able to ensure that projects were running with valid CTE and CTO. There was lack of infrastructure and manpower at SPCBs/UTPCCs despite having sufficient funds.



## Recommendations

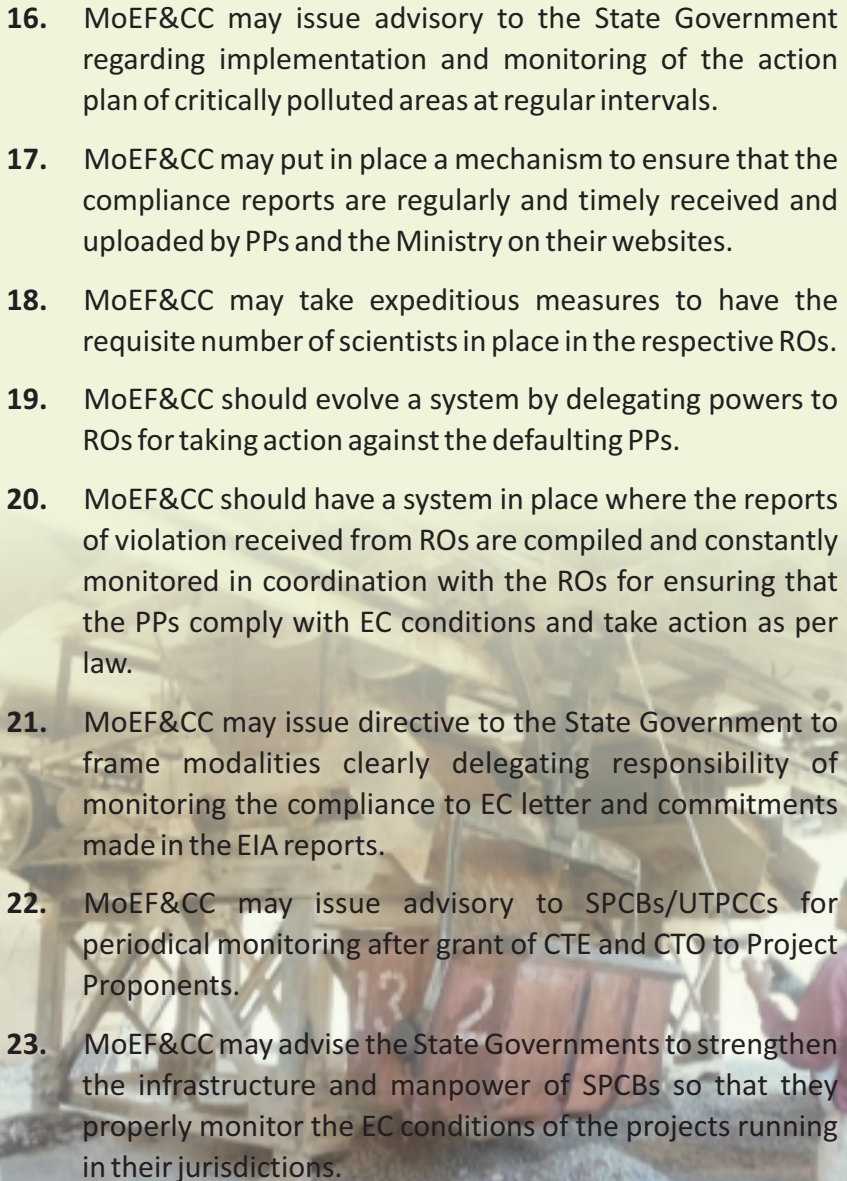
1. In order to increase transparency and fairness in grant of EC, MoEF&CC may streamline the processes including adhering to the timelines as per the EIA Notification.
2. MoEF&CC, while scrutinising the EIA reports, may ensure that they are as per the ToR, comply with the generic structure, baseline data is accurate and concerns raised during the public hearing are adequately addressed.
3. MoEF&CC may evaluate the entire process of EIA by involving all stakeholders, following legal processes and make suitable amendments in EIA Notification 2006 rather than resorting to Office Memorandums.
4. MoEF&CC may grant fresh EC to the PPs only after verifying the compliance to the earlier EC conditions.
5. MoEF&CC may adhere to its circular of 2010 on EC of coal linked mine for Thermal and Metallurgical projects so that firm coal linkage is available and the status of environment and forestry clearance of the coal sources i.e. the linked coal mine/coal block is known.
6. MoEF&CC may take suitable action in consultation with NIC for revalidation of database and arrive at correct picture of the projects which have been granted EC by the Ministry.
7. MoEF&CC may consider bringing conditions of EC compatible with the nature and type of project in order to avoid non-uniformity in similar kind of projects.
8. The EIA reports/EC letters should clearly mention cost of activities under EMP and ESR along with the timelines for their implementation.

Fugitive dust



9. MoEF&CC may consider making EMP/EC condition(s) more specific for the area to be developed under green belt and species to be planted in consultation with Forest/Agriculture Department along with post EC Third Party evaluation.
10. MoEF&CC may consider endorsing copy of EC letter issued to each project to the Central Ground Water Board/State Agencies to ensure monitoring of Ground Water extraction.
11. MoEF&CC should work out strategies in co-ordination among ROs, CPCB, SPCBs/UTPCCs and other Departments of State Governments to strictly monitor the compliance of conditions mentioned in the EC periodically.
12. MoEF&CC and SPCBs may consider adopting risk based approach to monitor the conditions stipulated in the ECs of the project and devise schedule for percentage check of six-monthly compliance reports and environment statements.
13. MoEF&CC may consider bringing suitable condition by mentioning the name and number of post/posts to be engaged by the proponent for implementation and monitoring of environmental parameters.
14. MoEF&CC may consider bringing the mandatory EC conditions on installation of monitoring stations and frequency of monitoring of various environmental parameters in respect of air, surface water, ground water, noise, etc.
15. MoEF&CC may, in consultation with SPCBs, introduce a system of surprise check by the SPCBs at premise of PPs to verify the third party testing of environmental parameters.

Muck overflowing to the river due to damaged muck site in Sainj Hydroelectric Power Project, Kullu, Himachal Pradesh

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16. MoEF&CC may issue advisory to the State Government regarding implementation and monitoring of the action plan of critically polluted areas at regular intervals.
17. MoEF&CC may put in place a mechanism to ensure that the compliance reports are regularly and timely received and uploaded by PPs and the Ministry on their websites.
18. MoEF&CC may take expeditious measures to have the requisite number of scientists in place in the respective ROs.
19. MoEF&CC should evolve a system by delegating powers to ROs for taking action against the defaulting PPs.
20. MoEF&CC should have a system in place where the reports of violation received from ROs are compiled and constantly monitored in coordination with the ROs for ensuring that the PPs comply with EC conditions and take action as per law.
21. MoEF&CC may issue directive to the State Government to frame modalities clearly delegating responsibility of monitoring the compliance to EC letter and commitments made in the EIA reports.
22. MoEF&CC may issue advisory to SPCBs/UTPCCs for periodical monitoring after grant of CTE and CTO to Project Proponents.
23. MoEF&CC may advise the State Governments to strengthen the infrastructure and manpower of SPCBs so that they properly monitor the EC conditions of the projects running in their jurisdictions.

Workers working without personal protection equipments in Manal Lime Stone Mining Project, Himachal Pradesh



Thickener sludge stored in tank at Tata Metalic, West Benga



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