

FOREST AND ENVIRONMENT DEPARTMENT

3.6 Working of Jharkhand State Pollution Control Board

3.6.1 Introduction

On creation of the new State, Jharkhand State Pollution Control Board (Board) was set up in September 2001. The main objective of the Board was to plan and execute programmes for prevention, control and abatement of water and air pollution and pollution from solid wastes including bio-medical and plastics wastes. The Board was to inspect the Pollution Control System (PCS) adopted by industries, hospitals, nursing homes and municipal bodies; analyze stack samples and prescribe standards for control of pollution according to various Acts enacted by Government of India (GOI) and Rules and policies framed thereunder by the State Government. The Forest and Environment Department, the nodal department, was responsible for formulation of policies relating to all environmental issues and exercising its control through the Board.

At the State level, the Principal Secretary, Forest and Environment Department (F&ED) was the nodal officer. The Board comprised of Chairman, the Chief Executive of the Board, and 16 members including a Member Secretary appointed by the State Government. The Board was assisted by five Regional Officers at Deoghar, Dhanbad, Hazaribagh, Jamsshedpur and Ranchi, one central laboratory at Ranchi, headed by the Board Analyst and four regional laboratories each under the regional officers. A Research and Development (R&D) Cell was also formed in August 2003.

A Performance Audit on the working of the Board since its inception up to March 2007 was carried out during April to August 2007 through test check of records of the Board, the Principal Secretary, F&ED, all the five regional offices, central laboratory, R&D Cell and three Municipal bodies (Ranchi, Dhanbad and Hazaribagh) during April to August 2007. The audit findings and recommendations were discussed (November 2007) with the Principal Secretary, F&ED.

Audit findings

3.6.2 Financial Management

Financial resources of the Board comprised of assistance from Central Pollution Control Board (CPCB)/Government of India (GOI) and reimbursement of water cess by GOI under section 8 of Water Cess Act. No objection certificate fee, consent fee under sections 21 and 25 of the Air and Water Acts respectively, R&D fee, authorisation fee under Rule 8 of the Bio Medical Waste Rules, grants from the State Government etc also comprised the financial resources.

Under section 38 of the Water Act and section 34 of the Air Act, The Board is to prepare Budget Estimates (BEs) and send it to the nodal department. The Board however, never sent BEs to the Department and BEs were prepared on *ad-hoc* basis. The Board failed to receive any grant from the State

Government during 2001-07. The Government accepted non-submission of budget and asked the Board to submit it regularly in future. Regarding resources of Board, the Government assured to increase them by taking appropriate steps. Financial Resources and its utilization by the Board were as under:

(Rupees in lakh)

Year	Opening Balance	Assistance from CPCB/GOI	Internal resources including water cess	Total	Expenditure	Excess(+) Surplus(-)
2001-02	4.54	49.35	57.19	111.08	80.77	(-) 30.31
2002-03	30.31	--	204.76	235.07	175.90	(-) 59.17
2003-04	59.17	42.59	252.91	354.67	334.26	(-) 20.41
2004-05	20.41	127.70	305.94	454.05	442.14	(-) 11.91
2005-06	11.91	--	304.39	316.30	306.55	(-) 9.75
2006-07	9.75	--	411.53	421.28	271.90	(-) 149.38
Total	136.09	219.64	1536.72	1892.45	1611.52	

Source: State Pollution Control Board, Jharkhand

The Board only received Rs 2.20 crore as assistance from CPCB/GOI as against the sanctioned amount of Rs 3.48 crore during 2001-05 for different schemes such as preparation of environment status reports, strengthening of laboratories, computerization of offices, National Green Corps (NGC) programmes etc. GOI did not release Rs 1.28 crore due to diversion of fund (Rs 19.89 lakh), non-submission of UCs (Rs 94.26 lakh), etc. by the Board.

The Board replied that the funds were inadvertently utilized on unspecified purposes which would be recouped after getting approval of the competent authority.

3.6.3 Institution of SPCB

The functioning of the board was affected due to non-appointment of regular Chairman

The Board was created with twelve members (increased to 17 from 2006) including the Chairman. As per recommendation of Ministry of Environment and Forest (MoEF), GOI, the Chairperson appointed should have special knowledge or practical experience in respect of matters related to environmental protection. Though six Chairpersons were appointed (two with regular charge and four with additional charge) as of August 2007, there was nothing on record to ascertain the special knowledge and practical experience of the Chairpersons. This affected the functioning of the Board. As per sections 8 and 10 of the Water and Air Act respectively, the Board is to meet quarterly to observe rules or procedures in regard to the transaction of its business. However, only 13 against 23 Board meetings were held during September 2001 to July 2007 and it failed to prescribe rules and procedures to be observed during such meetings. The Government stated (November 2007) that the Board had been asked to hold regular meetings.

3.6.3.1 Building

The offer of central assistance for expansion/renovation of the building could not be availed for want of Detailed Project Report

In 2002, the Board sent a proposal of Rs 1.26 crore to GOI for its own office building. In 2005 GOI agreed to provide financial assistance limited to 50 per cent of the cost of expansion or Rs one crore which ever was less subject to the condition that land would be provided by the State and the remaining expenditure would be borne by the Board. For this, the Board was to submit a

proposal according to the norms of State Public Works Department (PWD). The Board failed to submit required proposal and was deprived of financial assistance. It continues to be housed in a rental building for last six years. The Government replied (November 2007) that district administration had been requested to provide land.

3.6.3.2 Central Laboratory

Delay in functioning of Central Laboratory and excess expenditure of Rs 10.79 lakh on purchase of equipment

Under the provisions of the Water and Air Acts, the Board notified the laboratory at Ranchi as the Central Laboratory in July 2003 but it became functional only in June 2006. The Laboratory was located in a dilapidated building of the Regional Office, Ranchi. Central PWD also suggested a new construction. Government replied (November 2007) that funds would be provided for Laboratory building.

To test the various parameters of water/air pollutants, MoEF sanctioned Rs 1.57 crore and released Rs 94.26 lakh during 2003-05 for purchase of instruments/equipment to strengthen the Central and Regional Laboratories. Provision, list and rates of instruments/equipment were also provided by MoEF. The Board purchased three Electronic Analytical Balances and three Chemical Oxygen Demand Digesters at the rate of Rs five lakh and Rs 52,750 each against the specified rate of Rs 1.75 lakh and Rs 40,000 respectively. Besides, two Bio-Chemical Oxygen Demand Incubators were purchased in excess of provision at the rate of Rs 33,000 each. This resulted in excess expenditure of Rs 10.79 lakh for which no reason was on record. Further Ion Chromatograph, procured for Rs 13.02 lakh in March 2007, was not installed till August 2007 for want of an air conditioner, UPS and a working table. This resulted in inability to test heavy metals, cyanides, arsenics, chromium phenolic, etc.

3.6.3.3 Research and Development (R&D) Cell

Research and Development Cell established in August 2003 did not undertake even a single research work as of March 2007

According to section 17 (d),(h),(i),(j) of Water Act, the Board is to research and investigate on water pollution to evolve economical and viable methods of treatment and utilisation of sewage and trade effluents in agriculture and their disposal on land. Board though established a R&D cell in August 2003, no research work was undertaken as of August 2007. The services of the personnel posted to the cell were being utilised for works other than research. Government stated that ambient air and water quality were monitored and documented in the cell. The reply was not acceptable as the Cell was established for research and investigation work on water pollution only.

3.6.3.4 Man Power Management

One hundred thirty three posts of various cadres were lying vacant. This affected the functioning of Board

No posts were sanctioned for the Board headquarters as of August 2007. In regional offices 135 personnel were posted against the sanctioned strength of 268 as indicated in *Appendix-3.8*. Large vacancies in the regional/field offices were compounded by diverting officials to the Board headquarters. Acute shortage of manpower led to poor maintenance and upkeep of records, large number of pending applications for consent for discharge of effluent and emission, inspection of industrial units, sampling, R&D works. The Board did not take any effective steps to sanction new posts and fill the existing vacancies. The Government assured to fill-up the vacancies.

3.6.3.5 Training

Training programme was not organised

According to the sections 17(e) of Water Act and 17(d) of Air Act, the Board is to organise training programmes for persons engaged or to be engaged in prevention, control and abatement of water and air pollution. However, no such training programme was ever organised by the Board for upgrading the skills of its personnel engaged in R&D works, laboratories, inspection of pollution control systems, sewerage treatment plants of trade and domestic effluent, etc.

3.6.3.6 Annual Reports

Annual reports were never prepared

According to sections 39(2) of the Water Act and 35(2) of the Air Act, the Board is required to furnish annual reports giving full account of its activities on control of water, air and other pollutions to the State Government which was to be laid before the State legislature. The Board never furnished any annual reports to the State Government since its inception in 2001. Similarly, under rule 8(1) of the Municipal Solid Wastes (Management and Handling) Rules, 2000, the Board is required to send an annual report with regard to the implementation of these rules by 15 September every year to CPCB. However, no such report was ever sent.

3.6.4 Water and Air Acts

Lack of coordination between Board and State Government resulted in failure in implementing the Pollution Control Acts

The Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981 are designed to maintain the wholesomeness of water, to prevent and control natural water from being polluted and control air pollution by preservation of the quality of air.

State Government is to monitor compliance of these Acts through the Board established under the Act. The State Government did not formulate any scheme for prevention, control and abatement of pollution as there was lack of co-ordination between the Board and the Government.

3.6.4.1 Industries running without consent

Board had no information of the industrial units running without consent

According to the Sections 25 and 21 of the Water and Air Acts respectively, without previous consent of Board, it is not permissible to establish or take any step to establish any industry, operation or process or any treatment and disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into stream, well or on land and to pollute the air by emission.

As per the nature and level of pollution, all industries have been categorized into red, orange or green industries, based on their capacity to damage environment. It was noticed that 3218 out of 3660 applications were pending with the Board as of March 2007. The Board did not maintain a consolidated consent register as required under Act. In the absence of such register, the Board had no consolidated information of the industrial units running without consent and thus could not monitor these units centrally. The Government stated (November 2007) that in pending cases, show cause notices and directions were issued. The reply was not acceptable because the Board failed to take any action on show cause notices.

3.6.4.2 *Inspection*

Regular inspection of industries was not done by the Board

The Water and Air Acts required compulsory and regular monitoring through field inspection for prevention, control and abatement of pollution. Without drawing up of any schedule/norms, the Board inspected the industrial units and plants only for issue of consent order. It did not maintain any records showing the dates of inspection, names of unit and results of inspection. Thus, there was no systematic monitoring of follow up of inspections and its compliance.

3.6.4.3 *Non formulation of comprehensive programme*

Comprehensive programme was not prepared by the Board

According to the Sections 17(a), (b), (c) of both, the Water and Air Acts, the Board is to plan a comprehensive programme for prevention, control and abatement of pollution of streams, wells and air in the State, collect and disseminate information and advise the State Government to execute these through a suitable mechanism. However, the Board did not formulate any comprehensive programme during 2002-07.

3.6.4.4 *Pollution of water through effluents*

TSS in the stream of Damodar river was far above the prescribed limit

According to the Sections 17(g), (h) and (i) of the Water Act, the Board is required to evolve economical and viable methods for treatment of sewage, trade effluents, their utilisation in agriculture and disposal of sewage and trade effluents on land or into stream taking into account the tolerance limits of pollution permissible in water of the stream. The Board however, did not perform any of these functions satisfactorily. It was seen that Total Suspended Solids (TSS) in the effluents discharged from ash ponds of Bokaro Thermal Power Station (BTPS) and Tenughat Vidyut Nigam Ltd. (TVNL) was 5,164 microgram (mcg)/litre and 9,876 mcg/litre respectively against the prescribed limit of 100 mcg/litre during October 2006 causing severe water pollution in the Damodar River.

3.6.4.5 *Enforcement of Air Pollution measures*

Provisions of the Air Act 1981 were not enforced effectively

According to the Section 21(5) of the Air Act, industries are to undertake necessary pollution control measures including installation of Pollution Control System (PCS) for treatment of emission before its discharge into air. Report of stack monitoring of thermal power stations at Bokaro and Tenughat, during 2005-06, showed dust concentration in emissions (278.26 mcg/m³ and 181.70 mcg/m³) beyond the prescribed limit (150 mcg/m³). Similarly, the Suspended Particulate Matter (SPM) in Thermal Power Stations (Chandrapura- 513.51 mcg/m³ and Bokaro-577.65 mcg/m³) and collieries (Dhori-519.92 mcg/ m³ and Swang-592.47 mcg/m³) was above the norm of 500 mcg/m³ per 24 hours. No action was taken against the units for installation of PCS to bring down the emission level.

3.6.4.6 National Ambient Air Quality Monitoring (NAAQM) Programme

CPCB identified Dhanbad as a critically polluting zone and Jharia and Jamshedpur as high polluting zones based on NAAQM programme. In Dhanbad, the annual average concentration of respirable SPM in ambient air during 2004 and 2005 were 129 and 121 mcg/m³ respectively against the permissible limit of 60 microgram/m³ for residential areas.

During 2004, in Jharia and Jamshedpur, the annual average concentration of SPM in ambient air was 508 microgram/m³ and 434 microgram/m³ respectively against permissible limit of 360 microgram/m³ for industrial area. The Board neither undertook any study nor did it initiate any special action for Dhanbad, Jharia and Jamshedpur zones to combat the serious damage to environment.

The Government stated that action plan had been forwarded to MoEF, GOI. Supporting documents however, were not shown to Audit.

3.6.4.7 Unauthorised collection of fee

There is no provision in the Water Act for issuance of No Objection Certificate (NOC) for establishment of industries and charging any fee for the same. The Act only provides for collection of fee for giving consent regarding discharge of trade and domestic effluents. Scrutiny disclosed that during 2002-07, the Board unauthorisedly collected Rs 1.59 crore as fee for grant of NOC in addition to consent fee.

In reply it was stated that the procedure was followed on the lines prevailing in the State of Bihar. The reply was not tenable as the irregularity was already pointed out in Audit Report (Civil) for the year ended 31 March 2001, Government of Bihar.

The Board unauthorisedly collected fee for granting NOC against the provision

3.6.5 Water cess

According to section 3(1), (2) & (3) of the Water cess Act and Rule 4 & 5 of the Water cess Rules, 1978, the Board is to levy and collect water cess from the users on the basis of returns submitted by them.

The Board however did not maintain any consolidated records and was not in a position to assess the amount of cess to be paid by the consumers and also could not invoke penal clauses under Section 14 (2) of the Act for delayed payment of water cess. In absence of the consolidated records, water cess could not be assessed during 2002-07 and proved to be a financial loss to the Board.

Though the Board identified 396 industrial water consumers, it did not maintain any consolidate record indicating the assessment, demand and collection of water cess. Water cess of Rs 11.99 crore was collected from industrial water consumers against the assessment of Rs 23.34 crore during 2002-07 leaving out Rs 11.35 crore. Of this, Rs 7.95 crore was outstanding with TVNL. The Board did not take any effective steps to realize the outstanding amount. The Board stated that in some cases over assessment was done which was being rectified.

Shortfall in collection of water cess was Rs 11.35 crore

Water cess of Rs 40.50 lakh was not levied

Test check of the records of eight industrial water users disclosed that the Board failed to levy water cess of Rs 40.50 lakh (*Appendix 3.9*) under Ranchi Regional Office. For want of proper documentation, audit could not ascertain the loss resulting from delayed payment.

3.6.6 Waste Management

Municipal waste is generated by households and consists of paper, organic waste, metals etc. Increasing use of plastic and packaged products also contribute significantly to municipal waste. The industrial production processes and commercial activities also generate wastes of hazardous category. Bio-medical waste is generated by hospitals and other health service providers and consists of discarded drugs, waste sharps, microbiological and biotechnological waste, human anatomical waste, animal waste etc.

3.6.6.1 Hazardous waste

Hazardous wastes were dumped in premises of industries and in low areas causing serious environmental problems

The Board intimated MoEF, GOI that the State generated 189252.83 MT of hazardous wastes every year (recyclable: 13424.36 MT, incinerable: 8021.90 MT and disposable: 167806.57 MT). According to the Hazardous Waste (Management and Handling) Rules, 1989, the Board is to identify and notify the sites for disposal of hazardous waste but this was not done. Thus, hazardous wastes were stored in the premises of the industries and dumped in low areas causing grave environmental problems, particularly to flora and fauna of the area.

The Board prepared an inventory of units generating hazardous wastes only for the Jamshedpur region upto August 2006. Out of 192 units covered in this region, 17 units were found 'non-complying'. No action was taken against the defaulting units. The Board was unaware about the other hazardous waste generating units in the State. Government accepting (November 2007) the fact stated that the matter for providing land for disposal of waste would be looked into.

3.6.6.2 Bio-medical waste

There was no system of collection and disposal of Bio-medical waste in the State

According to the Bio-medical waste (Management and Handling) Rules, 1988, authorisation of the Board is mandatory for each medical service provider including research laboratories, handling Bio-medical wastes. The Board did not have any centralised records of medical service providers (pathological laboratories, nursing homes, hospitals etc.) in the State. The Board neither undertook any survey nor sought information on the quantity of bio-medical wastes being generated in the State. In the absence of an assessment, the Board could not devise adequate plans and programmes for combating such waste.

A test check of records of regional office, Dhanbad showed that the Board identified 250 medical service providers in Dhanbad and Bokaro districts. Of these, 101 were granted authorisation under the rules, 79 did not apply and 70 applications were under process. Of 101 authorisations, in 54 cases, although the conditions imposed by the Board were not fulfilled, no action was taken against the defaulting units.

3.6.6.3 *Municipal Solid Waste*

State Government had not formulated any policy for management of municipal solid waste

According to the Municipal Solid Waste (Management and Handling) Rules, 2000, Municipalities are responsible for disposal of municipal solid waste. Under the rules, the Board is responsible for monitoring the compliance of standards regarding groundwater, ambient air, leachate and compost quality including prescribed incineration standards. The Board is also responsible for issue of authorisation to the municipal authority or an operator of a facility, within 45 days, stipulating compliance criteria and standards as specified. Though indiscriminate disposal of solid waste was causing environmental degradation, State Government did not formulate any policy for management of municipal solid waste. No designated sites were identified by the municipal authorities for disposal of waste. The Government stated (November 2007) that the matter had been taken up with the Urban Development Department.

3.6.7 Other topics of Interest

MoEF, GOI launched the National Green Corps (NGC) programme in all the districts of the country to create awareness about keeping our surroundings clean and conserving natural resources by reusing and recycling wastes. The programme was to be implemented in 100 selected schools in each district, which were to form an eco-club to organize seminars, debates, rallies, street theatres, human chain etc. For this, Rs 1000 was to be provided to each such school every year. GOI released Rs 81.95 lakh to the Board during 2001-05 against sanction of Rs 109.91 lakh. The Board disbursed Rs 81.75 lakh to the Deputy Commissioners (DCs) for distribution to schools. Utilisation certificates were not obtained from the concerned DCs for onward transmission to GOI as a proof of the fact that Rs 81.75 lakh was spent on the activities envisaged under NGC. The Board stated that the UCs would be collected from DCs.

3.6.8 Audit of accounts

Accounts of the Board was not finalized as State Government did not appoint an auditor

Sections 36 and 40 of the Air and Water Acts respectively envisaged that an auditor shall be appointed by the State Government on the advice of the Comptroller and Auditor General of India. The auditor shall send a copy of his or her report together with an audited copy of the accounts to the State Government. The latter shall lay it before the State Legislature as soon as possible. However, the State Government did not appoint any auditor and as a result the accounts were never finalised. The Government stated that the auditor would be appointed on the advice of Comptroller and Auditor General of India.

3.6.9 Conclusion

There was lack of co-ordination between the Board and State Government. The nodal department seems to be content with issue of reminders instead of taking effective steps. It never sent its BEs, required under the statutes, to the State Government. The State Government never gave any grants to the Board. The Board failed to augment its own financial resources by due implementation of the various Acts and schemes. It continues to be housed in

a rental building. The laboratories were ill equipped. Due to huge shortage of staff, maintenance and upkeep of records was very poor. There was large number of pending applications for consent for discharge of effluent and emission, inspection of industrial units, sampling, R&D works. The implementation of the various Acts was lax. Auditor was never appointed, as required under the statutes, to look into the affairs of the Board.

3.6.10 Recommendations

- The Board should ensure a workable coordination with the State Government, Forest and Environment Department and other departments/agencies for effective implementation of statutory provisions relating to pollution.
- The Board should maintain a consolidated consent register, water cess collection register to keep a watch over industrial units running without consent and for realisation of water cess.
- The Board should strictly adhere to the financial rules and procedures.
- The Board should evolve a system for collection and disposal of hazardous and Bio-medical waste and formulate a policy for solid waste management immediately.
- Proper mechanism should be put into place to ensure that the environmental pollution is kept under the permissible limits and mass awareness programme, training etc. should be organised regularly.

The matter was reported to the Government (September 2007); their reply had been received (November 2007) and incorporated with suitable comments wherever necessary.