



Chapter - 4

THEME: POLLUTION CONTROL

Pollution Control is the process of reducing or eliminating the release of pollutants (usually man-made) into the environment. It is regulated by various environmental agencies that establish limits for the discharge of pollutants into the air, water and land. Non compliance to the laid down standards for pollution control poses risks to human health and the environment.

4.1 Non-achievement of objectives of Ecocity Programme

Central Pollution Control Board (CPCB) initiated the 'Ecocity Programme' at a total cost of ₹30 crore under the Tenth Five Year Plan for implementation in six cities which were selected for the first phase of the programme in view of their cultural/historical/heritage and tourism importance. Works undertaken under the programme remained incomplete in all selected six cities and ₹1.88 crore was lying unspent with State Pollution Control Boards for over seven years. Thus, the objectives of the programme which was to improve the environment and bring in visible results through implementation of identified environmental improvement projects in selected towns and cities were not achieved.

4.1.1 Introduction

Central Pollution Control Board (CPCB), a statutory organisation under the Ministry of Environment and Forests (MoEF), conceptualized an 'Ecocity programme', the overall objective of which was to improve the environment of selected cities and bring in visible results in environment through implementation of identified environmental improvement projects. The programme, in the long run, was expected to help create awareness and local dynamics for decreasing environmental burden/stress, improving living conditions and help in achieving sustainable development in the city through a comprehensive urban improvement system. CPCB initiated the 'Ecocity Programme' at a total cost of ₹30 crore under the Tenth Five Year Plan, for the period 2002-07.

Keeping in view the cultural/historical/heritage and tourism importance of the cities/towns, 12 cities/towns⁵⁸ were selected for implementation of the Ecocity programme, in the first phase. However, the programme was initiated in only six towns viz; Ujjain, Puri, Tirupati, Kottayam, Vrindavan and Thanjavur. More towns were to be covered later, based on the results from these towns.

(i) Implementation of the programme

The Ecocity programme was to be coordinated and executed by CPCB and was to be implemented by municipalities with local coordination and fund management by the respective State Pollution Control Boards (SPCBs).

(ii) Funding Pattern

Municipalities of the selected towns were to submit 'Detailed Project Reports (DPRs)' to CPCB which would place them before an Expert Committee for evaluation. Based on recommendations of the Expert Committee, CPCB would approve the proposal. Of the total cost of the project, CPCB was to contribute 50 *per cent* and the balance was to be borne by the municipality, either from its own funds or through financial institutions/any other means. The funds were to be released by CPCB to SPCBs who were required to release payments to the respective municipalities in four instalments.

⁵⁸ Mathura, Vrindavan (Uttar Pradesh), Ujjain (Madhya Pradesh), Puri (Orissa), Vapi (Gujarat), Thanjavur (Tamilnadu), Bharatpur (Rajasthan), Shillong (Meghalaya), Deogarh (Jharkhand), Rishikesh (Uttaranchal), Tirupati (Andhra Pradesh) and Kottayam (Kerala).

Detailed audit findings

It was observed in audit that works undertaken under the programme remained incomplete in all the six cities selected for the first phase of the programme. In Puri, no progress was made on three projects sanctioned and entire fund released was lying unspent with SPCB/Municipality for more than seven years. In Kottayam, both the projects identified and sanctioned remained incomplete and none of the activities identified later were implemented. In Ujjain, the projects being implemented remained incomplete. In Vrindavan, no project was implemented under the Ecocity programme and the entire fund sanctioned to the SPCB was lying unutilised with it for more than seven years. In Thanjavur, no projects were even started under the Ecocity programme and in Tirupati; only three out of six projects were implemented.

It was further observed in audit that CPCB did not take any action to revive any of the projects after August-September 2008, leaving the works undertaken under the programme incomplete. In addition, the second phase of the project was not initiated at all. Thus, the objectives of the programme to improve the environment through implementation of identified environmental improvement projects in towns and cities of cultural/historical/heritage and tourism importance were not achieved.

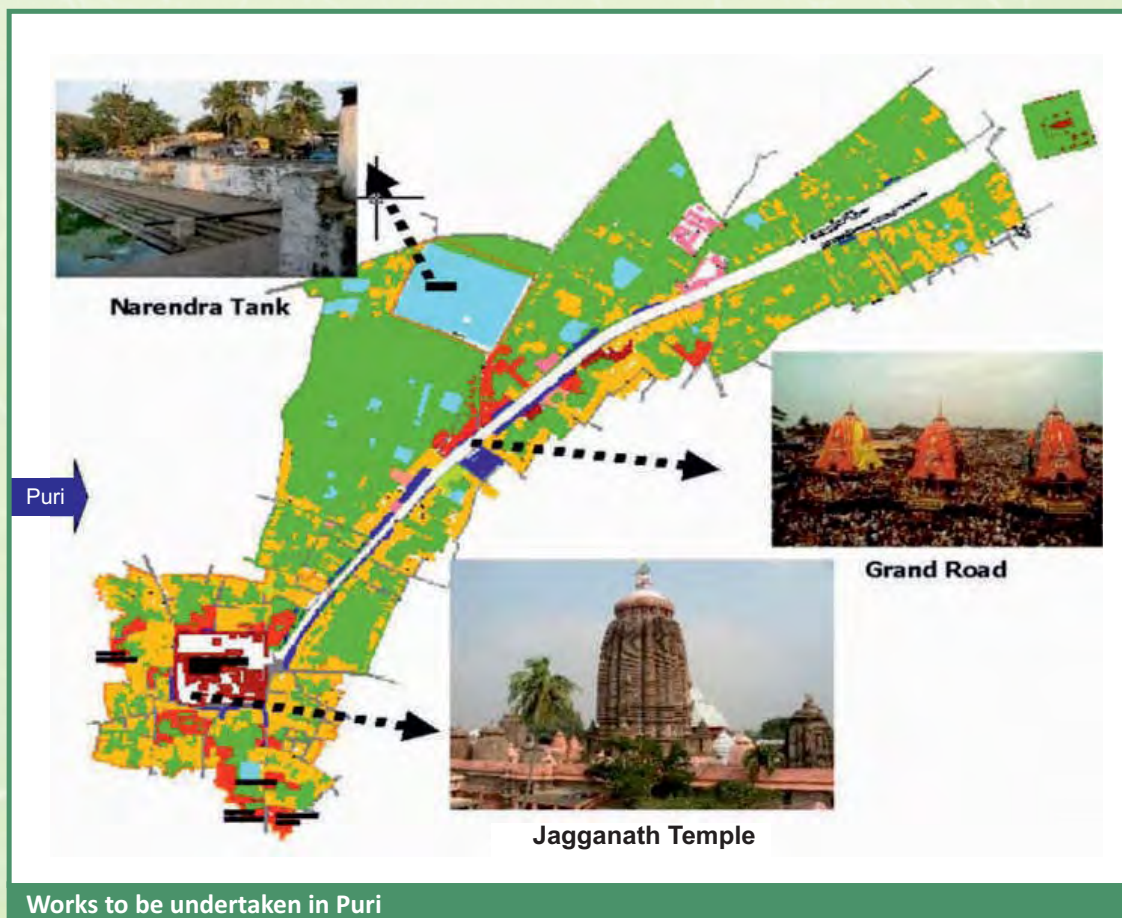
Detailed audit observations relating to the implementation of the Ecocity programme in all the six cities taken up in the first phase of the programme are discussed in the succeeding paragraphs.

4.1.2 Puri

CPCB, in April 2006, approved three projects namely, (1) Construction of cement concrete drain with cover slab along the roads around Jagannath Temple; (2) Improvement of drinking water point at lions gate near Jagannath Temple; and (3) Improvement of public toilet near Narendra tank with scheduled date of completion between August and December 2006. The total cost of these projects was ₹64 lakh with share of CPCB being ₹32 lakh. CPCB authorised Orissa SPCB to release the first installment to the municipality in June 2007. In this regard, it was observed in audit that:

- CPCB received the draft DPR in November 2003 which was not upto the mark and was, therefore, returned in December 2003 to the Puri municipality for modifications. The final revised DPR was received from Orissa SPCB only in June 2006 i.e., after a delay of more than two and half years. The reason for delay was attributed to the DPR not being as per the required procedure/format.
- Without receipt/approval of DPR, CPCB released ₹56 lakh as advance to Orissa SPCB in March 2003. CPCB authorised Orissa SPCB to release the first installment to the municipality in June 2007. Orissa SPCB released ₹9.62 lakh to Puri municipality only in February 2008, i.e., much after the targeted date of completion of August/December 2006. Reasons for delay were not made available by CPCB/Orissa SPCB.
- CPCB last reviewed the progress of the project in August 2008 wherein it was decided that Orissa SPCB would seek commitment from the Puri municipality for completion of sanctioned activities and that Orissa SPCB would identify more schemes⁵⁹ for inclusion under the Ecocity programme. In November 2008, Orissa SPCB sent a proposal for five schemes for approval from CPCB. However, CPCB did not make any further efforts to approve/implement these projects.
- No progress was reported under the programme till February 2010.

⁵⁹ Other than already identified under Jawaharlal Nehru National Urban Renewal Mission (JNNURM).



Thus, it can be concluded that CPCB hurriedly released ₹56 lakh (in March 2003) to Orissa SPCB without receipt/approval of DPR and firm commitment from the Puri municipality. As a result, Municipality did not execute the project seriously and the Ecocity programme failed to achieve its objectives. Moreover, the entire amount of funds released was lying unspent with Orissa SPCB/Municipality for more than seven years.

In February 2010, MoEF replied that there has not been any significant progress in case of Puri. It further stated that since this town was also covered under the JNNURM programme, the Ecocity programme for Puri was, therefore, being closed and the SPCB was being pursued to return the unspent amount along with accrued interest thereon. The reply was not acceptable in audit as these projects were scheduled for completion between August and December 2006, however even after a delay of more than three and half years, CPCB failed to get the project work executed by the municipality. Moreover, the reply was silent as to whether this particular incomplete work covered under ecocity programme has been included in the JNNURM programme.

4.1.3 Kottayam

In January 2005, after approval of the DPR, CPCB sanctioned two projects namely, rejuvenation of Mundar river and renovation of Kacherikadavu boat jetty canal for ₹1.29 crore with scheduled date of completion by March 2005. The total share of CPCB was ₹64.33 lakh. CPCB released ₹21.55 lakh as advance to Kerala SPCB in March 2003 and released the remaining amount between April 2006 and July 2007. Kerala SPCB in turn released ₹51.47 lakh to Kottayam municipality. In this regard, it was observed in audit that:



Boat Jetty, after partial renovation, Kottayam

- The first installment of ₹21.55 lakh was released by CPCB to Kerala SPCB without approval of the DPR by the Expert Committee.
- In January 2008, a physical verification of the project site carried out by the CPCB Zonal office, Bangalore indicated that the work relating to only one of the projects⁶⁰ was complete and the other project⁶¹ was partially complete. However, in December 2008, Kerala SPCB sent a revised proposal of ₹40.94 lakh for completing both the pending projects. This is indicative of the fact that both the projects were incomplete. CPCB took no action on the revised proposal.

As a result, both the projects identified under the Ecocity programme remained incomplete leading to wasteful expenditure of ₹51.47 lakh. In addition, ₹12.86 lakh was lying unutilised with Kerala SPCB for more than seven years.

In February 2010, MoEF replied that most of the schemes have been completed in Kottayam and that the matter is being followed up for completion of the rest of the schemes and furnishing of utilisation certificates for this town.



Mundar river, Kottayam after partial work under Ecocity scheme

⁶⁰ Kacherikadavu boat jetty canal.

⁶¹ Rejuvenation of Mundar river.

The reply of MoEF was not supported by the completion reports for the projects. In the absence of completion reports and utilisation certificates from the Kottayam municipality, it is not clear as to how MoEF satisfied itself about the completion of the projects.

4.1.4 Ujjain

CPCB released an advance of ₹67.42 lakh to Madhya Pradesh SPCB in March 2003 for implementing a project “Mahakal Core Area Development” at a total cost of ₹11.70 crore. In view of the upcoming Simhastha⁶² in 2004, the Ujjain Municipal Corporation (UMC) took up a sub-component “Excavation/Embankment of Rudrasagar” of the project on priority. The DPR for the said sub-component was approved by CPCB in May 2003 at a cost of ₹94.88 lakh, of which CPCB's share was ₹47.44 lakh. The project was to be completed by March 2004 which was extended to March 2005. In this regard, it was observed in audit that:



On going work at Rudrasagar, Ujjain

- In July 2004, UMC submitted audited utilisation certificate (UCs) for an amount of ₹63.21 lakh for the work done under the project. CPCB, in June 2004, requested Madhya Pradesh SPCB to verify the work but Madhya Pradesh SPCB, in the inspection conducted by it in July 2004, was not satisfied with the desiltation operation and was not in a position to verify the claim of UMC due to waste water entering the water body. Despite this, in January 2005, CPCB authorised Madhya Pradesh SPCB to release ₹14.23 lakh to UMC.
- In July 2005, Madhya Pradesh SPCB recommended that CPCB keep the Ecocity programme in abeyance due to unsatisfactory implementation of the earlier sanctioned projects.
- Two more review meetings were held in May 2007 and in August 2008 but the new schemes to be implemented with the unspent funds lying with Madhya Pradesh SPCB were yet to be identified. CPCB did not take any efforts to get the project re-started. No further progress was reported as of date.

⁶² Simhastha is a bathing festival of Ujjain and a dip in the river during the bathing festival is considered holy.

Thus, the projects being implemented under the Ecocity programme remained incomplete and ₹73.58 lakh already spent on the project was rendered wasteful. Further, UMC had submitted UCs for work worth ₹63.21 lakh against the work claimed to be done (₹73.58 lakh). Thus, UC for work worth ₹10.37 lakh was still pending.

In February 2010, MoEF agreed that there has not been any significant progress in case of Ujjain. MoEF also stated that this town was also covered under the JNNURM programme. The Ecocity programme for this place is, therefore, being closed and SPCB is being pursued to return the unspent amount along with accrued interest thereon.

However, the reply was silent as to whether this particular incomplete work covered under ecocity programme has been included in the JNNURM programme. Thus, the Ecocity programme failed to get implemented in Ujjain even after seven years of release of funds.

4.1.5 Vrindavan

CPCB released an advance of ₹43 lakh to Uttar Pradesh SPCB in March 2003 for implementation of a project "Vrindavan Ecozone" at a total cost of ₹2.87 crore. The share of CPCB towards the project was ₹1.43 crore. MoU for implementation of the activities namely, (i) improvement of 2 km stretch from Kaliadaha Ghat to Kesi Ghat of parikrama path (ii) improvement of Banke bihari area in Vrindavan' and (iii) comprehensive improvement along the road connecting all major pilgrim/tourist and restoration/development of Gandhi Park identified under the programme was signed with Vrindavan Nagar Palika Parishad (VNPP) and Uttar Pradesh SPCB in August 2006. In this regard, it was observed in audit that:



Re-development of Parikrama Marg, Vrindavan

- None of the projects sanctioned under the Ecocity programme could be taken up for implementation because VNPP was not able to provide commitment for its share of 50 per cent funds as agreed in the MoU.
- In a review meeting held in August 2008, it was decided that in case there was no commitment for the matching funds for the project from VNPP or through any other agency, Uttar Pradesh SPCB should identify appropriate schemes to be taken up under the Ecocity programme within 40 days.
- No further progress was reported as of date and CPCB did not make any efforts to get new projects identified. In October 2007, it asked Uttar Pradesh SPCB for refund of the pending amounts which has not been returned so far (February 2010).

Thus, no project was implemented under the Ecocity programme and the entire amount (₹43 lakh) released to Uttar Pradesh SPCB was lying unutilised with it for more than seven years.

In February 2010, MoEF replied that there has been no progress under the project and that Uttar Pradesh SPCB has been asked to return the amount released along with accrued interest.

4.1.6 Thanjavur

In June 2006, the Expert Committee recommended the project “Renovation of four old tanks” for implementation. However, the administrative approval was accorded in March 2007 at an estimated cost of ₹76 lakh with CPCB's share of ₹38 lakh. In this regard, it was observed in audit that:

- Though the agreement for implementation was sent to Tamil Nadu SPCB in March 2007, the signed agreement was returned by Tamil Nadu SPCB to CPCB only in August 2008, i.e., after a delay of more than 17 months.
- Tamil Nadu SPCB had agreed to take only some parts of the project⁶³ at a total cost of ₹44 lakh. CPCB did not make any effort to sanction the works which Tamil Nadu SPCB had agreed to take up under the programme. As a result, no projects could be implemented till date under the Ecocity programme.

In February 2010, MoEF agreed that there has been no progress in the case of Thanjavur and stated that there had been no release of funds in this case.

4.1.7 Tirupati

In March 2003, CPCB released an advance of ₹49.35 lakh to Andhra Pradesh SPCB for a project “Core Area Development”, the total cost of which was ₹8.07 crore and the contribution of CPCB was ₹1.64 crore. The balance amount of ₹6.43 crore was to be contributed by other agencies, including Tirupati Municipal Corporation (TMC). It was observed in audit that:

- CPCB sanctioned only three projects namely (i) Covering of storm water drains on the northern, southern & western side of the Govindarajaswamy temple, (ii) connecting Koneru to Narsimha Tirtha by pipeline to replenish water on permanent basis and (iii) Cleaning/ desilting of drains in the Core Area out of the fifteen projects submitted by TMC. The total cost of the three projects was ₹39.97 lakhs with CPCB's share of ₹19.99 lakhs.

⁶³ Renovation of only two tanks instead of four tanks.



Work relating to covering of storm water drains, Tirupati

- Andhra Pradesh SPCB sent three more proposals⁶⁴ for Tirupati at a cost of ₹4.78 crore. However, CPCB did not take any action to sanction these projects.
- In August 2008, Andhra Pradesh SPCB intimated that the three sanctioned projects were completed and the same was verified by CPCB's Zonal office.

Thus, only three out of six projects sanctioned under the Ecocity programme were carried out for Tirupati, that too after a delay of four years.

It was further observed in audit that no action had been taken by CPCB after August-September 2008 on the Ecocity project, leaving the works undertaken under the programme incomplete in all the six cities. This resulted in non-achievement of the objectives for which the programme was initiated. In addition, the second phase of the project, which was to be built on the successes of the first phase, was not yet initiated.

In February 2010, MoEF replied that most of the schemes have been completed in Tirupati and that the matter was being followed up for completion of the rest of the schemes and furnishing of utilisation certificates for this town. The fact remained that work was done in only one out of six cities under the Ecocity programme and that too, partially.

4.1.8 General audit findings

In addition to the specific city-wise audit observations discussed above, there were some common deficiencies observed in Ecocity programme implementation which are discussed below:

- **Unspent balance not refunded:** CPCB released ₹2.79 crore to SPCBs against which SPCBs released ₹92 lakh to municipalities. The unspent balance of ₹1.88 crore was lying with SPCBs. CPCB did not approach SPCBs for refund of the unspent funds lying with them since March 2003. In February 2010, MoEF replied that the matter of refund was being pursued by CPCB

⁶⁴ (i) construction of Public toilets at appropriate locations, public drinking water facilities etc., (ii) covering of drains and (iii) multi-storied parking facility.

- **Interest accrued by the SPCBs not disclosed:** As per MoUs, SPCBs were to keep a record of the interest accrued on the budget releases by CPCB and same was to be provided to CPCB while submitting request for release of subsequent installments. The interest accrued was to be adjusted while releasing subsequent installments to SPCBs. It was observed in audit that only two SPCBs, Kottayam and Puri had disclosed the accrued interest earned on payments released to them and that too only once in a span of the seven year duration. In February 2010, MoEF replied that all the SPCBs involved in the project have a separate account for this project. The refund of the unspent amount will therefore include interest accrued in their accounts. The reply is not acceptable as three SPCBs namely, Vrindavan, Ujjain and Tirupati had not intimated the actual accrued interest earned by them to CPCB.
- **Commitment from the municipalities not taken:** It was observed that CPCB did not take firm commitment from municipalities regarding contribution of matching fund. As a result, in the case of the cities of Puri and Vrindavan, work could not be started till date as there was no commitment from the municipalities for the matching fund. In February, 2010, MoEF replied that the award and implementation of the project was based on the tripartite agreement, which is a binding instrument and involves commitment for all parties including municipalities. The reply is not acceptable as CPCB did not include any penalty clause in the agreement which can be invoked in the event of default.
- **Delay in implementation of the projects:** On an average, the duration of the projects sanctioned by CPCB was for six months. However, there were delays of almost four years in implementation of these projects and they continued to be implemented without any sanction for extension by CPCB. Accepting the facts, in February 2010, MoEF replied that these are operational issues and CPCB has been directed to frame revised guidelines to address these issues.

4.1.9 Conclusion

The overall objective of the Ecocity programme was to improve the environment of cities having cultural/historical/heritage and tourism importance and bring in visible results through implementation of identified environmental improvement projects in these towns and cities.

It was observed in audit that no commitment was taken from municipalities regarding contribution of matching fund and works undertaken under the programme remained incomplete in all selected six cities. Moreover, ₹1.88 crore was lying unspent with SPCBs for over seven years.

In February 2010, MoEF replied that CPCB has been asked to recast the entire Ecocity programme in order to dovetail the environmental concerns with municipal functions and budget to ensure participative and pragmatic planning as well as to take care of shortcomings in the implementation of the scheme.

Recommendation - 27

CPCB/MoEF may strengthen the project implementation mechanism and its control/monitoring mechanism before the second phase of the programme is launched, so that it can effectively achieve the objectives set out for the Ecocity programme and improve facilities for tourists/pilgrims.

4.2 Non-achievement of objectives of control of pollution caused by leather tanneries

National River Conservation Directorate (NRCD) sanctioned interest-free loan of ₹67.72 crore to Government of West Bengal for construction of a Common Effluent Treatment Plant at Bantala, about 20 km south-east of Kolkata. The project was originally targeted for completion by November 1997 but could not be completed as of June 2010. NRCD has sanctioned only four out of seven components under the project as yet. Delay of more than 12 years in completion of the project adversely impacted the objective of ensuring safe disposal of toxic industrial effluents and solid waste from tanneries, causing immense environmental damage and health risks.

4.2.1 Introduction

Hon'ble Supreme Court of India, in a public interest litigation case, ordered in April 1995 that 538 tanneries located in three clusters in Kolkata and generating about 30 million litres per day (mld) of effluents be shifted from the city to a leather complex and a Common Effluent Treatment Plant (CETP) be provided to treat the effluent generated from the proposed leather complex. Accordingly, the Government of West Bengal (GWB) decided to relocate the tanneries in a 1100 acre integrated leather complex, Calcutta Leather Complex (CLC) at Bantala, about 20 km south-east of Kolkata. In May 1995, National River Conservation Directorate (NRCD) received a proposal from GWB in this regard. The Cabinet Committee on Economic Affairs (CCEA), in its meeting held in October 1995, approved the proposal to set up 30 mld CETP in Calcutta Leather Complex. Accordingly, in November 1995, NRCD issued administrative approval for setting up of CETP, indicating that the expenditure sanction would be issued after the Detailed Project Report (DPR) was approved. Out of the total estimated project cost of ₹65 crore, the share of NRCD was ₹32.50 crore and balance of ₹32.50 crore was to be contributed by GWB. GWB decided to implement the project on Build, Operate and Transfer (BOT) basis and an agency was identified for implementation. The share of Central Government was in the form of interest free loan to GWB. The project was to be completed by November 1997.

However, it was observed that the estimated project cost of ₹65 crore did not include the cost estimates of Effluent Transportation System (ETS), Common Chrome Recovery System (CCRS), Safe Solid Waste Disposal System (SSWDS) and Treated Effluent Sump and Pumping station (TESPS) which were integral parts of the CETP network and the working of the CETP was incomplete without these components. Only in November 2007, CCEA approved the revised proposal for the CETP with seven components at a revised cost of ₹135.44 crore with NRCD's share being ₹67.22 crore. The scheduled date of completion of the project was March 2010. The overall project envisaged construction of : (i) module 1 and 2 of CETP: 2 CETPs of 5 mld capacity each, (ii) module 3 and 4 of CETP: 2 CETPs of 5 mld capacity each, (iii) module 5 and 6: 2 CETPs of 5 mld capacity each, (iv) Effluent Transportation System, (v) Common Chrome Recovery System, (vi) Safe Solid Waste Disposal System, and (vii) Treated Effluent Sump and Pumping station.

NRCD released ₹42.24 crore to GWB against which an expenditure of ₹39.52 crore was incurred on the project as on 31 March 2009. In July 2005, CLC had started partial operations with completion of four modules of CETP. However, as of February 2010, the Common Chrome Recovery System, Safe Solid Waste Disposal System, and Treated Effluent Sump and Pumping Station are yet to be completed even after 15 years of the decision of the Supreme Court.

The audit findings with respect to the implementation of the project are given below:

4.2.2 Delay in implementation

The entire project was envisaged to be completed by March 2010 as per revised EFC (original completion date was November 1997). The current status of implementation of seven components approved by CCEA under the project is summarised in table below:

Table - 16

Status of implementation of seven components		
Sl. No.	Name of the component	Remarks
1.	CETP Modules 1 & 2 (5 mld capacity each)	Completed after a delay of nine months
2.	CETP Modules 3 & 4 (5 mld capacity each)	Completed
3.	CETP Modules 5 & 6 (5 mld capacity each)	Not sanctioned
4.	Effluent Transportation System (ETS)	Completed after a delay of two years
5.	Common Chrome Recovery System (CCRS)	Completed
6.	Safe Solid Waste Disposal System (SSWDS)	Not sanctioned
7.	Treated Effluent Sump and Pumping Station (TESPS)	Not sanctioned

Thus, even after delay of more than 12 years, NRCD could sanction only four out of seven components under the project and the project remained incomplete as of June 2010.

4.2.3 Irregular release of interest-free loan from Grants-in-Aid head

According to Government Accounting Rules 1990, provision for the release of grants-in-aid and loans to State/Union Territory Governments under Central Plan Schemes and Centrally-sponsored Plan Schemes should be made in the Union Budget under the major heads '3601/3602-Grants-in-aid to State/Union Territory Governments' and '7601/7602 Loans and Advances to State/Union Territory Governments' respectively. However, it was noticed in audit that NRCD did not make any budgetary provisions for sanctioning the loan under the project. Instead, during 2001-09, NRCD released interest free loan of ₹42.24 crore to GWB from its Grants-in-Aid head. This was in violation of provisions of Government Accounting Rules 1990. In July 2009, NRCD replied that subsequent to the signing of loan agreement, the account under the loan head would be created and funds released so far would be adjusted as loan amount accordingly. The reply was not acceptable as all these provisions were to be complied with before releasing the loan.

4.2.4 Loan agreement not signed

According to Rule 219 of General Financial Rules, 2005 (GFRs), all sanctions to loans should specify the terms and conditions of loan including repayment terms. However, it was noticed that NRCD was yet to finalise the terms and conditions for repayment of loan and sign the loan agreement. In July 2009, NRCD replied that the draft loan agreement had not been submitted by GWB despite repeated requests. As such, further funds would not be released till the loan agreement was signed. In Audit's opinion such formalities should have been completed before release of funds.

Further, NRCD stated in November 2009 that GWB had signed an agreement with CLC Tanners Association in May 2005 whereby the tanners were to return the cost of construction of the CETP. It was, however, noticed that the Association was now reluctant to pay back the construction cost and was requesting that the loan be converted to a grant, raising the prospect of GWB not returning the loan to NRCD. In Audit's opinion such request of CLC Tanners Association should not be entertained as it will go against the 'polluters pay principal'.

4.2.5 Improper monitoring by NRCD

As per the terms and conditions of the sanction, the progress of the project would be reviewed from time to time by the Steering Committee (SC) headed by Secretary, MoEF. The SC had to meet at least once in three months. However, it was noticed in audit that the SC was not meeting regularly and during 2002-2009 only six meetings of SC were held. Further, four components of the project namely (i) CETP Modules 1 & 2, (ii) CETP Modules 3 & 4, (iii) ETS and (iv) CCRS were completed but NRCD was yet to receive formal completion report from GWB. Moreover, NRCD had also not carried out any evaluation of these components as required under the approved guidelines.

4.2.6 Idling and improper maintenance of equipment

In April 2008, Deputy Director, NRCD visited the site of CETP at Calcutta Leather Complex for monitoring and observed that:

- i. Most of the industries were not doing proper pre-treatment which had led to the choking of ETS at some locations. Few tanneries were not discharging into the ETS and were bypassing it by releasing untreated effluents which had contaminated the water in the storm water drains.
- ii. The CCRS costing ₹5.96 crore had not started its operations even though the same had been constructed more than two years back.
- iii. CLC Tanners Association, the agency managing the operations of CETP, had not employed technical persons with adequate qualification and experience. As a result, CETP was not functioning properly creating a situation where disposal of the untreated/ partially treated wastewater might create further environmental pollution in CLC.



Defunct aerator tank

- iv. CLC Tanners Association had been illegally depositing the sludge on the land earmarked for CETP Modules 5 & 6.
- v. The temporary hazardous wastes storage sites created within CETP had completely filled up and further storage facility was not available. Further, no activity had been initiated on the site earmarked for disposal of hazardous solid wastes of the CLC.
- vi. The filter presses in the CETP Modules 3 and 4 were not in working condition. Also, most of the filter presses in CETP Modules 1 & 2 were not working.



Defunct filter press

In May 2008, NRCD requested GWB to follow up with the agencies concerned so that the performance of CLC was improved and all mandatory environmental norms were complied with. However, GWB was yet to intimate the follow up actions taken by it and NRCD had also not reminded GWB to expedite the same. NRCD replied in November 2009 that GWB had been repeatedly reminded for improving the performance of the components already commissioned.

4.2.7 Environmental impacts of non-achievement of objectives

It was observed that only 15 mld waste water was reaching the CETP from around 250 tanneries operating in CLC. Few tanneries were not discharging effluent into ETS and a major portion of the effluent was either percolating to the ground water or creating cesspools in CLC and not reaching the designated disposal point, since there was no proper final disposal point for the treated effluent from CETP.



Effluents flowing along the boundary of CETP

Further, MoEF, Eastern Regional Office, Bhubaneswar observed the following in February 2009:

- The aerator tank, primary and secondary clarifiers were found not functioning properly. The colour of final discharge of treated effluent into the main course was found to be black and spreading bad odour.
- Analysis report revealed that levels of TSS⁶⁵, COD⁶⁶, BOD⁶⁷, Cr⁺⁶ (hexavalent chromium⁶⁸) and total chromium were much higher than the prescribed limits and were in gross violation of norms.
- Saving dust (end cuts of finished leather products), flesh linings and trimmings were seen dumped on the roadside. Since, saving dust, flesh linings and trimmings contain chromium, its dumping would pollute the surface water and therefore, further dumping should be stopped and all the dumped materials should also be removed immediately to the Common Solid Waste Disposal Facility.
- The solid wastes were chromium bearing residue and sludge, which might also leach and contaminate the ground water and create water pollution.
- Some of the individual tanneries were releasing plant effluents in the open area outside their boundary, instead of discharging into common drains set up for the purpose, from where effluents were sent to CETP.

⁶⁵ Total Suspended Solids

⁶⁶ Chemical Oxygen Demand

⁶⁷ Biological Oxygen Demand

⁶⁸ Hexavalent chromium is recognized as a human carcinogen.



Savings dust being dumped at roadside

Also, as per the report of Central Pollution Control Board, Zonal Office, Kolkata (visit to CLC in January 2009), the following environment impacts were reported:

- Analytical results show that the performance of CETP is not proper and yet to be stabilised.
- Two fixed chromium recovery units were not in use and the total chromium concentration of about 25mg per kg of ETP sludge was a matter of serious concern.



Effluents from the tanneries accumulating in the open

4.2.8 Conclusion

Thus, the project failed to achieve its stated objective of ensuring safe disposal of industrial effluents and solid waste from tanneries, causing immense damage to the environment. The project still remained incomplete even after more than 12 years of the original scheduled date of completion. Further, the possibility of recovery of interest free loan of ₹42.24 crore released to the Government of West Bengal is also doubtful.

Recommendation - 28

MoEF may monitor execution of the project more closely to ensure its speedy completion and achievement of planned objectives in a time bound manner. The sanction of remaining components may be expedited after ensuring that the technologies adopted for them is not obsolete. MoEF may involve its state units to provide continuous feedback on actual usage of infrastructure by the tanneries situated in CLC and insist on imposing heavy penalties/closure of tanneries in case the tanneries do not route their effluents through ETS and CETP so that the damage to the environment is minimised and it serves as a deterrent to not only tanneries situated in CLC but also at other places.