



**KERALA STATE POLLUTION CONTROL BOARD**

കേരള സംസ്ഥാന ജലീനീകരണ നിയന്ത്രണ ബോർഡ്

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Date: 25.08.2011

From

The Member Secretary

To

Shri N K Gupta  
Sr.Env.Engineer  
Central Pollution Control Board  
Parivesh Bhavan  
East Arjun Nagar  
Delhi – 110032

Sub:- Review-GKA action plan, Kerala

Ref:-Letter no. B-29012/IESS(CPA)/2011-12 dated 16.08.2011 from the Central  
Pollution Control Board

Sir,

As per the instruction of the CPCB an in-house review committee has been constituted for the bi-monthly review of the implementation of action plan for GKA. The second meeting of the committee was conducted on 27.06.2011.The progress on the time bound measures to be implemented by industries in Eloor Edayar and Ambalamugal Area was assessed in the meeting. Progress report based on the review is submitted herewith.

Yours sincerely,

MEMBER SECRETARY

for n/a M

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**SECOND REPORT OF THE LOCAL  
COMMITTEE TO REVIEW  
THE ACTION PLAN PROPOSED IN GREATER  
KOCHI AREA (GKA), KERALA**

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## **Introduction**

The Ministry of Environment and Forests, based on the progress in implementation of action plan and recommendation of CPCB passed order vide office memorandum no.J11013/5/2010-IA.II(I) dated 23.05.2011, lifting the moratorium imposed on new developmental projects in Greater Kochi area, subject to certain conditions. The Board monitors the progress in implementation of action plans by the industries as per the schedule by conducting meetings and field verification of the individual industries. The establishing of new industries in Eloor- Edayar area is strictly restricted and subject to the decision of the Board. Stringent safe guard measures and conditions are imposed on industries functioning in this area.

A meeting was held on 06. 04.2011 with major 17 category industries in the Greater Kochi Area regarding online data management system for emission and effluent monitoring and data transfer. All those industries falling under the 17 category/red category are directed to install continuous stack emission/effluent quality monitoring system and to link the same to the CPCB /SPCB website and also to link the data to SPCB server. Action has been progressing to install the server and software at the Board's end. The industries having online facilities are directed to complete data linking within one month time.

Environmental Surveillance Centre, which has been established at Eloor in 2005 for close monitoring of pollution in Eloor- Edayar area was strengthened for round the clock monitoring in the area. An Environmental Surveillance Van equipped with portable analyzers/monitors is made functional for the purpose from June 2011 onwards.

## **Proceedings of the committee**

The committee constituted for the review of implementation of action plan had its second meeting at the Regional office of the Kerala State Pollution

Control Board, Ernakulam on 27.06.2011. The following members were present:

- Smt.P. Molikutty, Member Secretary, KSPCB – Chairperson
- Sri. M.S. Sujith-Unni, Executive, Confederation of Indian Industry -Member
- Sri. Mathukutty Cyriac, BPCL-Kochi Refinery-Member
- Sri B Siva prasad, General Manager, District Industries Centre-Member
- Dr.K.G.Geetha, Representative, District Industries Centre-Member
- K.M. Sindhu, Deputy Town Planner, Regional Town Planning Office -Member
- Sri A.Farook Sait, Senior Environmental Engineer, KSPCB-Member
- Sri M.A.Baiju, Environmental Engineer, KSPCB-Member
- Smt.M.S. Mythili, Chief Environmental Engineer, KSPCB-Convenor

The minutes of the meeting is attached as annexure.1

a. **Industry wise progress in implementation of action plan**

Sl.No	Name of the industry	Progress of short term action plan already proposed
1.	BPCL Kochi Refinery	<ol style="list-style-type: none"><li>1. Auto fuel of Euro 3 equivalent standards (sulphur level in Diesel – 350 ppm and Petrol 150 ppm) is being supplied, which will lead to a better air quality.</li><li>2. New Sulphur recovery unit at the DHDS plant is commissioned in March 2011.</li><li>3. Steps for partial replacement of fuel oil by LNG are in progress.</li><li>4. Continuous power supply for the ETP operation is ensured.</li><li>5. The online ambient monitoring data linked to the CPCB data bank. Action has been initiated to link the stack monitoring data to the CPCB website.</li></ol>

		partly transferred to TSDF and the action is in progress.
7	Travancore Cochin Chemicals, Udyogamandal	<ol style="list-style-type: none"> <li>1. Barium Sulphate deposits in the premises had been transferred to TSDF.</li> <li>2. The repair of the salt godown is completed and the sludge is being stored in roofed godown with concrete flooring.</li> </ol>
8	Binani Zinc Ltd, Edayar	<ol style="list-style-type: none"> <li>1. Facility is provided for treating the effluent from canteen.</li> <li>2. Filter press facility is provided for the clarifier sludge.</li> <li>3. Effluent quantity has been reduced by 35% of the consented quantity.</li> </ol>
9	FACT, Cochin Division	<ol style="list-style-type: none"> <li>1. All buildings are now provided with septic tank soak pit system.</li> <li>2. Spent catalyst waste (<math>V_2O_5</math>) stored in concrete pits was transferred to TSDF.</li> </ol>
10	Hindustan Organic Chemicals Ltd, Ambalamughal	<ol style="list-style-type: none"> <li>1. Process modification for achieving reduction of 5 % in fuel consumption has been completed and commissioned.</li> <li>2. Offer letter given to M/s Environment S.A India Pvt. Ltd for providing the online monitoring facility.</li> </ol>
11	FACT, PD Division	<ol style="list-style-type: none"> <li>1. 10 % reduction is achieved in effluent discharge.</li> <li>2. Bio gas plant is installed at FACT UD, for treating canteen effluent from both PD&amp; UD.</li> </ol>
12	CMRL	<ol style="list-style-type: none"> <li>1. Action has been initiated for providing online monitoring facility.</li> </ol>

**b. Long Term Measures.**

Sl. No.	Activity	Progress
1	Common Effluent Treatment Plant	Joint inspection of various departments at the plots of Indian Rare Earths Ltd Eloor and KSEB done for the identification of a suitable land for common sewage treatment facility for small scale industries in Edayar area and report submitted to Government
2	Telemetric Linkage	Action initiated to install server and software for the Board and also for the industries. The data linking of online facilities of industries will be completed with in two months.
3	Patrolling – cum – Emergency Response Squad	Additional surveillance engineers are posted for effective and constant visit in the Eloor-Edayar area. An Environmental Surveillance van is made functional from June 2011 onwards for round the clock surveillance in the area.
4	Sewerage and Sewage Treatment Plant for Kakkanad and GKA	Land identified for a common facility for Kochi Corporation and implementation is reported to be based on the fund availability.
5	Remediation of contaminated sites	An interim report is submitted after a preliminary study by NGRI as per the direction of CPCB. Implementations of suggestions are under consideration.
6	Water supply to Eloor - Edayar area	Matter was taken up with Kerala Water Authority. Currently drinking water is supplied to the residents of Eloor by FACT Ltd. and the expenditure is shared by HIL, FACT, IRE and Merchem. Drinking water is supplied to Edayar area by Binani Zinc Ltd. Kerala Water Authority has agreed to supply water within one year after commissioning the GIDA project.
7	Incinerator for CTSDf	Co processing of incinerable hazardous waste at cement kilns is being followed up.

8	E – Waste Treatment and Disposal at CTSDF	The proposal submitted by KEIL is under processing. E -Parisara in Karnataka is already in operation at Palakkad and their service is being utilized by the e-waste generators in Emakulam District. An awareness programme on E-Waste management was organized by Board on 28/01/2011 for the IT units in the GKA.
9	Municipal Solid Waste Management	An awareness programme was organized by Board on 23.02.2011 for local bodies.
10	Biomedical Waste Treatment Facility	An awareness programme was organized by Board on 09.02.2011 for Health Care Institutions and Kerala Enviro Infrastructure Ltd..
11	Green Belt Development	A project for providing of greenery around Edayar industrial area is under consideration.

### **Proposed follow up actions**

1. The industries having online monitoring facility shall link the data to the Boards website with in a period of one month. All major industries shall complete the process with in six months time. M/s Bharat Petroleum Corporation Ltd, Kochi agreed to provide technical support to other industries in this regard.
2. A meeting of major industries will be arranged shortly to review the progress of implementation of telemetric data linking system.
3. Confederation of Indian Industry shall follow up the action of member industries as per the action plan proposed.
4. The local committee shall be reconstituted by including representatives of Kerala Small Scale Industries Association.
5. A sub committee shall be constituted for field inspection to review the progress of implementation of action plan.
6. Facility for continuous monitoring of air quality in Eloor area shall be provided by the Board shortly.



**MINUTES OF MEETING OF THE LOCAL COMMITTEE TO REVIEW  
THE ACTION PLAN**

Date : 27.06.2011  
Time : 11.00am  
Venue : Kerala State Pollution Control Board, Regional Office, Ernakulam

The meeting started at 11.00am. The following members were present:

- Smt.P.Molikutty, Member Secretary, KSPCB – Chairperson
- Smt.M.S.Mythili, Chief Environmental Engineer, KSPCB-Convenor
- Sri M.S.Sujith Unni, Executive, Confederation of Indian Industry
- Sri Mathukutty Cyriac, BPCL-Kochi Refinery
- Sri. B.Sivaprasad , General Manager, District Industries Centre
- Dr.K.G.Geetha, Representative , District Industries Centre
- Smt.K.M.Sindhu, Deputy Town Planner, Regional Town Planning Office
- Sri A.Farook Sait, Senior Environmental Engineer, KSPCB
- Sri. M.A. Baiju Environmental Engineer, KSPCB

Smt. P.Molikutty, the Chairperson of the committee welcomed the members and informed that the moratorium imposed on new developmental projects in Greater Kochi Area has been lifted subject to certain conditions vide MoEF office memorandum no. J-11013/5/2010-IA-II(I) dated 23<sup>rd</sup> May ,2011 she communicated that in a discussion with Sri. Jayaram Ramesh, Minister for Environment and Forest had opined that industries shall initiate necessary action to mitigate pollution problems in abeyance to the Polluter Pays Principle . Then she explained the conditions subject to which the ban was lifted, as listed below:

1. CPCB and the respective SPCBs will immediately put the approved
2. SPCBs will monitor the implementation of the action plans as per their schedule and ensure that there is no slippage either in terms of

- timeframe or the activities to be completed relating to the action plan. The report will be submitted to CPCB.
3. CPCB will also develop a monitoring mechanism and put it in place within 30 days and monitor the implementation of these action plans, area – wise also carryout random checks on the environmental parameters for their quality. The results will be put on their website.
  4. The respective SPCBs / UTPCCs will monitor the pollution levels in this area on regular basis and if at any stage it is observed that the levels are increasing, it will be immediately brought to the notice of CPCB as well as MoEF and in such a situation the moratorium will be re- imposed.
  5. Independent third party periodic monitoring on the implementation of action plan will be supported. The results of the monitoring so carried out will be hosted on the website and also communicated to CPCB.
  6. Industrial cluster /area wise Committee comprising various stakeholders' interalia representatives of locals and experts in the relevant field will be setup to oversee the implementation of the action plans.
  7. The EACs / SEACs will take extra precaution during appraisal of projects to be located in these areas and prescribe the requisite stringent safeguard measures, so that the environmental quality is not deteriorated further in these areas.

After elaborating the conditions, a follow-up of the decisions of the last meeting was carried out Sri. V.Sivaprasad , General Manager ,DIC informed that a joint inspection of various Government Departments was carried out at the plots of IRE and KSEB in the identification of a suitable land and report is submitted to the Government. Smt. P. Molikutty pointed out that the matter is pending for quite a long time and she requested DIC to follow up the matter at Government level so as to avoid further delay. The Board had also agreed to join the follow up.

Smt.M.S. Mythili, Chief Environmental Engineer reported the progress on telemetric data linking :

As per the CPCB instruction, all large and medium industries in the Greater Kochi Area and other industries in the district falling under the 17 category are

directed to install continuous stack emission/effluent quality monitoring system and to link the same to the CPCB/ SPCB website by April 2011. The data has to be linked to the SPCB server also. A meeting was held on 06.04.2011 with the major/17 category industries in the Greater Kochi Area regarding online data management system for emission and effluent monitoring.

M/s Environment S.A India Pvt Ltd., Navi Mumbai, in a meeting on 25.4.2011(Monday) at Regional Office, Ernakulam has agreed to install the server and software for the Board and also for the industries. Industries having online facility can link their data to the PCB server by installing a software costing around Rs. 2, 40,000/. She opined that industries having online facilities may be directed to complete the data linking within one month time.

Sri. Sujith Unni, representative from CII informed that only a few major industries in the Greater Cochi Area are having their membership. The Chairperson of the committee requested to provide the list of members of CII to the Chief Environmental Engineer and to follow up actions of members. The suggestion to incorporate a representative from Kerala Small Scale Industries Association, was come up in the meeting and it was agreed to take necessary action for the reconstitution.

Smt.M.S. Mythili reported the progress of compliance of short term actions proposed. M/s. FACT Ltd (PD & UD) has transferred the entire ETP sludge vanadium pentoxide to TSDF and the effluent discharge was reduced to 16%. In the case of HIL 95% of ETP sludge accumulated in the two lagoons at the company premises are already transferred to TSDF. The sludge lying in one lagoon is completely removed to prevent further contamination of Kuzhikandam Thodu and surrounding land area. M/s. TCC Ltd. has submitted a proposal for installing a common scrubber system after combining all stacks of HCl synthesis units. Sri. Mathukutty Cyriac, BPCL-Kochi Refinery reported the progress of implementation of action plan as detailed below:

- The sulphur recovery unit was commissioned in March 2011.
- Auto fuel of Euro 3 equivalent standards (sulphur level in Diesel – 350 ppm and Petrol 150 ppm) are supplied presently, which will lead to a better air quality.
- Partial replacement of fuel oil by LNG is in progress
- Continuous power supply for the ETP operation is ensured.

- The online ambient monitoring data is linked to the CPCB data bank. An exclusive software is being developed to link the stack monitoring data to the CPCB website and the same shall be implemented within one month

Smt. M.S. Mythili also informed that the new captive power plant is commissioned at Philips Carbon Black Ltd. resulting in better emission quality. M/s. HOCL have informed that they have given offer letter to M/s. Environment S.A India Pvt Ltd for linking the online monitoring data to Board's Website. She opined that field inspection & physical verification of the action taken and review of progress of implementation shall be carried out by the committee. The chairperson of the committee suggested that a sub committee may be constituted for field inspection. Smt. M.S. Mythili informed that the functioning of the Board's office in the Eloor - Edayar Industrial area was strengthened by appointing four new Assistant Engineers and four Graduate Engineering Apprentices. A vehicle is arranged exclusively for the purpose of creating awareness among the public. Smt. Mythili communicated that the equipments dismantled and removed from the mobile van of the Board will be installed at a station at Eloor for the purpose of monitoring the air quality.

The following decisions were taken in the meeting:

1. Those industries having online facility shall link their data to the Board's website within a period of one month. All other major industries shall complete the process within six months time. M/s. BPCL shall provide technical support to other industries in this regard if required.
2. A meeting of the industries shall be arranged shortly to review the progress of implementation of telemetric data linking system.
3. CII shall forward list of members and shall follow up the actions of member industries as per the action plan proposed.
4. Regional Office and District offices of the Board shall follow up the relevant matters with respect to the action plan.
5. The local committee shall be reconstituted by including representatives of Kerala Small Scale Industries Association.

6. A sub committee shall be constituted with the following members for field inspection to review the progress of implementation of action plan:

- ❖ Smt.M.S.Mythili, Chief Environmental Engineer, KSPCB-Convenor
- ❖ Sri. B.Sivaprasad , General Manager, District Industries Centre
- ❖ Dr.K.G.Geetha, Representative , District Industries Centre
- ❖ Smt.K.M.Sindhu, Deputy Town Planner, Regional Town Planning Office
- ❖ Sri A.Farook Sait, Senior Environmental Engineer, KSPCB
- ❖ Sri. M.A. Baiju Environmental Engineer, KSPCB

7. Field inspection shall be carried out two weeks before the next meeting

The meeting came to an end by 12.30 pm.



M.S. Mythili  
Chief Environmental Engineer  
(Convenor)