



West Bengal Pollution Control Board
(Department of Environment, Government of West Bengal)
Paribesh Bhawan, Bldg. 10A, Block LA
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Memo no. 1656-328/WPB/SEE(K.O.)GEN/2005

Date: 08/09/2010

From: Subrata Ghosh,
Chief Engineer,
O & E Cell, WBPCB.

To : M/s. Hindustan Heavy Chemicals
B.T. Road, Khardaha, Dt. 24 Pgs (N)

DIRECTION

Ref : Notice for Closure issued by Board vide memo no.1120-328/WPB/SEE(KO)-Gen/2005 dt. 09/04/2010

Sir,

With reference to the above, the Board is hereby pleased to direct **M/s. Hindustan Heavy Chemicals** located at B. T. Road, Khardaha, Dt. 24 Pgs (N) to operate in compliance with the following conditions :

1. **That** the industry shall submit a detailed action plan for its overall environmental management including management of hazardous wastes within three [03] months from hereof in line with the guidelines attached herewith.
2. **That** the industry shall submit a time-bound action plan regarding conversion from mercury cell to membrane cell within three [03] months from hereof.
3. **That** the industry shall report to the Hon'ble Chairman, WBPCB on a monthly basis about its status of pollution control systems and action plans.
4. **That** the industry shall deposit a Bank Guarantee of Rs.20,00,000/- (Rupees Twenty Lakhs) only valid for twelve [12] months within fifteen [15] days from the date of issue of this direction in favour of the **WEST BENGAL POLLUTION CONTROL BOARD**, as an assurance to comply with the Board's directions.
5. **That** the industry shall deposit a Pollution Cost of Rs.5,00,000/- (Rupees Five Lakhs) only from the date hereof by Demand Draft to be drawn on Service Branch, Kolkata / Banker's cheque in favour of the **WEST BENGAL POLLUTION CONTROL BOARD** for failing to comply with the Board's directions.

Further, if in future the industry is found to operate in violation of the environmental norms and the directions issued by the Board, the Board will be at liberty to take stricter regulatory action including forfeiture of bank guarantee and immediate closure of the industry.

Yours faithfully

Sd/-

Subrata Ghosh
Chief Engineer

Enclo : As stated.

Guidelines to M/s. Hindustan Heavy Chemicals, B. T. Road, Khardaha, Dt. 24 Pgs (N)
as per recommendations made by Prof. S. Dutta, Pro-VC, Jadavpur University
following inspection of the industry dt.26/07/2010 along with other Board Officials

The unit shall switch over to the membrane cell technology from the existing mercury cell technology as per CREP recommendation. For this the unit should submit a time bound action plan. However till such conversion to the membrane cell technology, the unit shall strictly adhere to the following recommendations.

- ① Though the unit has taken shut down for five number mercury cells but they should take shut down of another good number of mercury cells.
- ① The unit shall develop facility for checking of 'Hg' in the hydrogen-filled cylinder on weekly basis. Activated carbon in the de-mercurisation tower / column of Hydrogen bottling plant to be checked for mercury content so as to assess the frequency of replacement of activated carbon bed in the tower/column. Such checking should be done in one column / month basis.
- ① Likewise, the unit shall check Hg content in chlorine gas after liquefaction and that in caustic soda on monthly basis.
- ① The unit shall arrange for cell room ventilation and on-line mercury checking system, and its treatment facility, if required. Positive steps for such activity should be initiated immediately. Till installation of such measuring facilities / instruments, the unit shall regularly check Hg content in their effluent. Hg content in the cell room ventilation should be checked manually by dragger test.
- ① Recycled effluent water used for preparation of brine solution should be checked for Hg content on regular basis and a log book to be maintained for that
- ① The unit shall contact the concerned authority (SWID) immediately for conducting hydro-geological study of the locality and ground water monitoring in and around the factory. After identification of proper sampling points ground monitoring should be done at these points on monthly basis.
- ① Sediments in the Khardh Khal and ponds located in and around the factory needs to be analyzed for Hg contamination, if any, on monthly basis. Similar study for surface water should also be undertaken on monthly basis.
- ① Hg content in the brine sludge should be measured on day to day basis. Composite samples may be analyzed before sending out the same to the CHWTDF. Log book for sludge generation along with the result for Hg content should be maintained meticulously.
- ① Ground soil testing for Hg content at 4-5 locations (composite samples) of the factory should be checked on monthly basis.
- ① Workers health study for mercury exposure to be done on yearly basis.
- ① Brine sludge should not be transferred and disposed off to the on-site storage facility manually, rather the unit shall install a system for collection of brine sludge in fixed specified container and the same shall be disposed off directly at the CHWTDF, Haldia. This will minimize human intervention and hazards associated with handling of such type of hazardous waste.
- ① Steps shall be taken immediately for sending the accumulated brine sludge from the on-site hazardous waste dumping pit to the CHWTDF.

Sd/-

Prof. S. Dutta
Pro-Vice Chancellor
Jadavpur University