



Z-11013/43/2011-IA.II (M)
Government of India
Ministry of Environment, Forests and Climate Change

3rd Floor, Vayu Block
Indira Paryavaran Bhawan, Jor Bagh Road
Aliganj, New Delhi-110003

Date: 08.04.2015

To

M/s Bhushan Steel Ltd.
Bhushan Centre, Ground Floor
Hyatt Regency Complex
Bhikaji Cama Place
New Delhi- 110066

Sub: Permission on trial basis for disposal of flyash generated from 410 MW TPP (110 MW of M/s Bhushan Steel Ltd. and 300 MW of M/s Bhushan Energy Ltd.) into mine void of Jagannath OPC of M/s MCL in Talcher, Distt. Angul, Orissa. - Continuation reg.

Sir,


This has reference to your letter dated 9th January, 2015 requesting for continuation of the above permission accorded on 05.09.2013.

2. The matter was reviewed by the Expert Appraisal Committee (Thermal Power) in its 30th Meeting held during 29th & 30th January, 2015. In acceptance of the recommendation of the Committee and in view of the information/clarification submitted by you with respect to the above project, the Ministry accords permission to continue the said disposal of fly ash on temporary basis for a *further period of 11 months i.e. till 14.02.2016, subject to compliance of interim Orders and final Judgment of Hon'ble NGT.* In the meantime, the following studies shall be continued/redone and submitted to the Ministry for appraisal by the EAC:-

- i) Chemical constituents of fly ash dumped in the mine void at different depths.
- ii) The water quality at the bottom of the fly ash dumped void and also at different depths if, available from the depths of the fly ash dump corresponding to the levels of the unconfined, semi confined and confined aquifer levels in the area.
- iii) The bioaccumulation and biomagnifications of trace elements in plants (herbs, shrubs and trees) and the invertebrates and also aquatic fauna from the mine void filled with fly ash should be investigated.
- iv) The biota (herbs, shrubs and trees of plants and soil invertebrates and other animals) inhabiting the areas located at 500 m, 1000m , 2000 m, 5000 m and 10, 000 m from the mine void filled with fly ash should also be studied.
- v) Ground water samples at different depths using piezometers should be analyzed from all the areas mentioned under item iv.
- vi) The distribution pattern of unconfined, semi confined and confined aquifers in the areas located within 10 km radius of the mine void filled with fly ash should be mapped and their connectivity with mine void filled with fly ash shall be investigated.
- vii) The direction of the movement of the ground water in all the three aquifers should be investigated.


- viii) The model of solute transportation should be based on the results obtained from the above mentioned studies.
 - ix) Appropriate controls (reference studies) should be used.
 - x) Radioactivity of fly ash sampled at different depths from the mine void fly ash dump should be analyzed.
 - xi) In all the above studies, the concentration of trace metals should be assessed.
3. This issues with the approval of the Competent Authority.

Yours faithfully,


(Dr. M. Ramesh)
Scientist 'D'

Copy to:

1. The Secretary, Department of Forests & Environment, Government of Orissa, Bhubaneswar.
2. The Chairman, Orissa State Pollution Control Board, A-118, Nilkanta Nagar, Unit - VIII, Bhubaneswar- 751 012
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
4. The Chief Conservator of Forests, Eastern Regional Office, Ministry of Environment & Forests, A/3, Chandrasekharapur, Bhubaneswar -751023.
5. The District Collector, Angul District, Govt. of Orissa.
6. Guard file/Monitoring File.


(Dr. M. Ramesh)
Scientist 'D'