# Follow-up on Environmental Clearances Granted in India- A case study on surface mining projects in State of Himachal Pradesh......

Abstract ID# is: 608

**Session: Making Follow-up Happen to transform IA Practice** 

**Summary Statement –** Effective follow up in environmental clearance requires meaningful conditions that are practicable to implement and are objective.



RANDEEP SINGH SAINI

CEO INDIA

greeneconomyipl@gmail.com

https://www.linkedin.com/in/randeep-singh-saini-987b3116/

www.greenalliance.in



## **Environment Impact Assessment Notification 2006**

- Environment Clearance Letter has set of conditions laid down which are to be monitored – A compliance report on these is to be submitted every 6 Months by 30 June and 31<sup>st</sup> Dec Every year for the period ending 31<sup>st</sup> March and 30 September, respectively.
- Amendment dated 7<sup>th</sup> October, 2014 (MoEF&CC O.M. dated 07.10.2014): The MoEF&CC vide notification dated 7<sup>th</sup> October, 2014 has categorised the EC conditions and decided that the conditions under both 'General' and 'Specific' and both for category 'A' and 'B' projects would be categorised as under:
  - > Conditions for Pre Construction phase.
  - Conditions for Construction phase.
  - Conditions for Post Construction/operation phase.
  - Conditions for entire life of the project.

• A model set of conditions are also provided as guidelines to Impact assessment Authorities for being helpful in framing conditions.

Conditions in general are – Part A : General conditions

Part B : Special Conditions

Or

Summary of the Project

Specific Conditions- Construction Phase

Operational Phase

**General Conditions** 

Total no of conditions for any project can be easily around 50

Online Proposal No. Project type Project Location Jamabandi. Land Status e. Project Capacity Mining Area Leases within 500 mtrs. From periphery of the area applied Letter of Intent Working Plan EMP Costs **CER Costs** Institutional Mechanisms for Env. Protection Validity period of EC

#### **Summary of the Project**

Where is the Baseline?

## **A Review of Conditions- SET-1 Statutory Compliances**

The environment safeguards contained/given in the proposal for management of environment pollution should be implemented in letter and spirit.

Six monthly environment monitoring reports should be submitted to the State Environments Impact Assessment Authority and Ministry of Environment Forests Regional Office at Chandigarh.

In the case of any change (s) in the scope of the project would require a fresh appraisal by this Ministry.

The SEIAA reserves the right to add additional safeguards measures subsequently, if found necessary and to take action including revoking of the environment clearance under the provisions of the environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguards measures in a time bound and satisfactory manner.

All other statutory clearances shall be obtained, as applicable by the project proponents.

These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, The Public liability (insurance) Act, 1991 and Environment Impact Assessment Notification, 2006.

Environment clearance is the subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in writ Petition No. 460 of 2004 as may be applicable to this project.

Any appeal against this environment clearance shall lie as per the relevant rules with the appropriate environment appellate authority

- 1 This Environmental Clearance (EC) is subject to orders/judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2<sup>nd</sup> August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors. before commencing the mining operations.
- The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2<sup>nd</sup> August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India &Ors.
- This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- 6 Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- 7 The PP shall adhere to the provision of the Mines Act, 1952; Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under, PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- 8 The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- 9 The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled —Impact of mining activities on Habitations-Issues related to the mining Projects where in Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area.





#### **A Review of Conditions- SET-2**

"Consent to establish" shall be obtained from State Pollution Control Board under Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981

Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. The topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site. Green belt of adequate width and density preferably with local species along he periphery of the plot shall be raised so as to provide protection against particulates and noise

Ambient noise levels should conform to residential standards both during day and night. Only limited necessary construction should be done during nighttime. Fortnightly monitoring of ambient air quality (SPM, SO<sub>2</sub> and NO<sub>x</sub>) and equivalent noise levels should be closely monitored during construction phase should be closely monitored during construction phase so as to conform to the stipulated standards fixed by the competent authority.

Soil and ground water samples shall be got tested from authorized agency to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants. Ground water level and its quality should be monitored regularly in consultation with Central ground Water Authority

### Air Quality Monitoring And Preservation

The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO<sub>2</sub>, CO<sub>2</sub> and SO<sub>2</sub> etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact

Mining Area: 2 Ha

EMP Cost: 6.8 Lakh

CER Cost: 8 Lakh

## C. Water quality monitoring and preservation

- In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board & SEIAA
- Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

#### **Compliance Replies –**

These conditions are not applicable to project. There is no construction phase involved.

NOT Applicable- No rainwater harvesting is proposed in EMP. This is a mining project as explained at S.No.3. However as CSR if any villager/ Panchayat want any material/funds for rainwater harvesting in the village the same are provided.

Yes, we comply with applicable conditions to best of our efforts.

Noted.

# D. Noise and vibration monitoring and prevention

- The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- 2. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.

### H. Green Belt

- The Project Proponent shall develop greenbelt in 7.5 m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the SEIAA irrespective of the stipulation made in approved mine plan.
- 7 The Project Droppont shall encount alantable / cr.

3. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron,

# A thought process needs to be initiated in IAIA to push forward for findings of work done over the years at ground level

## EIA Follow up IAIA 2000 Conference Hongkong

Jos Arts, Paula Caldwell & Angus Morrison-Saunders

## The feasibility of the EIA follow –up

- Is it financially and/or organizationally achievable to evaluate the issues

## Consideration of the following:

- Complexity and magnitude of proposed action
- Sensitivity of area
- Risk factors if mitigations are not implemented
- Political/ Social sensitivity of the project

## Conceptualizing guidelines to monitor environmental data involving locals

SESSION: THE CONTRIBUTION OF CITIZEN SCIENCE TO PARTICIPATORY IMPACT ASSESSMENT PUBLIC PARTICIPATION ID#95

# Let's continue the conversation!

Post questions and comments in the IAIA24 app.

#### RANDEEP SINGH SAINI

**CEO** 

**INDIA** 

greeneconomyipl@gmail.com

https://www.linkedin.com/in/randeep-singh-saini-987b3116/

www.greenalliance.in



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