

**A CASE STUDY ON "**  
**PRESENT STATUS OF MINING AND IMPORTANCE OF**  
**ENVIRONMENTAL CLEARANCE (EC) -WITH SPECIAL**  
**REFERENCE TO PUBLIC PARTICIPATION"**

**A**

**DISSERTATION**

**Submitted in partial fulfilment for the award of degree of**

**Master of Science**

**In**

**ENVIRONMENTAL SCIENCE**

**(2022-2023)**



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**DEPARTMENT OF ENVIRONMENTAL SCIENCE**

**ST. WILFRED'S P.G. COLLEGE, JAIPUR**

**UNIVERSITY OF RAJASTHAN**

## CERTIFICATE

This is to certify that Miss Himanshi sharma D/o Mr Raghunandan pachori has conducted her M.Sc. Dissertation work titled "**Present status of Mining & Importance of EC with special Reference to Public Participation**" under my supervision. This Dissertation is being submitted to fulfil the partial requirement for the award of degree of M.Sc. Environmental Science, under the Department of Environmental Science of St Wilfred PG College, affiliated to University of Rajasthan, Jaipur, Rajasthan.

Date:

Jaipur.



Dr prerna sharma

## DECLARATION

This is to certify that dissertation entitled, "**PRESENT STATUS OF MINING AND IMPORTANCE OF EC WITH SPECIAL REFERENCE TO PUBLIC PARTICIPATION**" submitted by me in partial fulfill for the award of the degree of M.Sc. (Environmental Science) of Department of Environmental science, University of Rajasthan, Jaipur (Rajasthan) is a record of the original work carried out by me. The matter embodied in this dissertation has not been submitted for the award of any other degree or diploma.

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## CERTIFICATE

This is to certify that **Miss Himanshi Sharma**, pursuing her **M.Sc. Final (Environment Science)** Final year from **St. Wilfred PG College, Mansarover, Jaipur, Rajasthan** has successfully completed her training on "**Present status of Mining & Importance of EC with special Reference to Public Participation**" at **Omega Test House** from **1<sup>st</sup> November 2022 to 31<sup>st</sup> January 2023**.

We found her sincere, hardworking, technically sound and result oriented. She worked well during her tenure. We take this opportunity to thank her and wish her all the best for her future.

For Omega Test House

  
Authorised Signatory



## Acknowledgement

I express my deep gratitude and appreciation to my college guiding staff and “**OMEGA TEST HOUSE**” officials, who assisted, guided and shared their insight in the dissertation work. I am indebted and hope that the product of our collaboration benefits each one as much as I got benefitted from the process.

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I am extremely thankful to the entire **OMEGA TEST HOUSE** team for providing me the platform, assisted me at each step and clarified the queries and doubts in reference to this case study.

At times, my studies carried out at great cost to unnoticed fellows. I thank my family and my fellow students for their continuous understanding and support.



Himanshi sharma

## Table of content

<b>S. No</b>	<b>Topic</b>	<b>Page no.</b>
Chapter .1	Introduction	9-12
Chapter.2	Evolution of EIA in the world	13-15
Chapter.3	History of EIA in india	16-17
Chapter.4	Review of literature	18-20
Chapter.5	EIA process in india	21-32
Chapter.6	Study area	33-38
Chapter.7	Material & method	39-54
Chapter.8	Observation	56-58
Chapter.9	Annexure	59-60
Chapter.10	Summary	61

## Chapter-1

### Introduction

#### What is Mining?

Mining is the extraction (removal) of minerals and metals from earth. Manganese, tantalum, cassiterite, copper, tin, nickel, bauxite (aluminum ore), iron ore, gold, silver, and diamonds are just some examples of what is mined.

#### 1. Why Mine?

Mining is a money making business. Not only do mining companies prosper, but governments also make money from revenues. Workers also receive income and benefits.

#### 1.2 - What is Environment Impact Assessment? What is the requirement of EIA for mining activities?

Environment Impact Assessment or EIA can be defined as the study to predict the effect of a proposed activity/project on the environment. A decision making tool, EIA compares various alternatives for a project and seeks to identify the one which represents the best combination of economic and environmental costs and benefits.

EIA systematically examines both beneficial and adverse consequences of project and ensures that these effects are taken into account during project design. It helps to identify possible environmental effects of the proposed project, proposes measures to mitigate adverse effects and predicts whether there will be significant adverse environmental effects, even after the mitigation is implemented. By considering the environmental effects of the project and their mitigation early in the project planning cycle, environmental assessment has many benefits, such as protection of environment, optimum utilization of resources and saving of time and cost of the project. Properly conducted EIA also lessens conflicts by promoting community participation, informing decision makers, and helping lay the base for environmentally sound projects. Benefits of integrating EIA have been observed in all stages of a project, from exploration and planning, through construction, operations, decommissioning, and beyond site closure.

#### Objectives of Environmental Impact Assessment

- To make sure that environmental considerations are explicitly addressed and incorporated into the development decision making process.
- To forestall and avoid, reduce or offset the adverse significant biophysical, social and other relevant effects of development proposals.
- To shield the productivity and capacity of natural systems and the ecological processes which maintain their functions.
- To encourage development that is sustainable and optimizes resource use and management opportunities.

#### How does mining affect the people?

1. It affects the health of the mining workers there. Since they leave puddles in the holes they've made, water-borne diseases such as malaria occur. basically, people would get easily infected by diseases and can be extremely sick or may possibly die.
2. When the miners release the chemicals in to different water sources (ocean, rivers, lakes) people who don't even work for mining may get hurt by using these water to drink or to wash things, or even bathe them selves.
3. Small scale miners (miners who mine in a small group of people around places) have to leave their homes along with their family for a long time and can not supply money or food for them until they come back.
4. Violent stuff such as Theft, drugs/alcohol, prostitution, rape, and sexual abuse occur to innocent people or other people.
5. Mining ruins cultural heritages such as sacred holy sites for people.

**How does mining affect the Environment?**

**Environmental Impacts**

The environmental responsibility of mining operations is protection of the air, land, and water. Mineral resources were developed in the United States for nearly two centuries with few environmental controls. This is largely attributed to the fact that environmental impact was not understood or appreciated as it is today. In addition, the technology available during this period was not always able to prevent or control environmental damage.

**Negative Impacts:**

**Air:**

All methods of mining affect air quality. Particulate matter is released in surface mining when overburden is stripped from the site and stored or returned to the pit. When the soil is removed, vegetation is also removed, exposing the soil to the weather, causing particulates to become airborne through wind erosion and road traffic. Particulate matter can be composed of such noxious materials as arsenic, cadmium, and lead. In general, particulates affect human health adversely by contributing to illnesses relating to the respiratory tract, such as emphysema, but they also can be ingested or absorbed into the skin.

**Land:**

Mining can cause physical disturbances to the landscape, creating eyesores such as waste-rock piles and open pits. Such disturbances may contribute to the decline of wildlife and plant species in an area. In addition, it is possible that many of the pre-mining surface features cannot be replaced after mining ceases. Mine subsidence (ground movements of the earth's surface due to the collapse of overlying strata into voids created by underground mining) can cause damage to buildings and roads. Between 1980 and 1985, nearly five hundred subsidence collapse features attributed to abandoned underground metal mines were identified in the vicinity of Galena, Kansas, where the mining of lead ores took place from 1850 to 1970. The entire area was reclaimed in 1994 and 1995.

**Water:**

Water-pollution problems caused by mining include acid mine drainage, metal contamination, and increased sediment levels in streams. Sources can include active or abandoned surface and underground mines, processing plants, waste-disposal areas, haulage roads, or tailings ponds. Sediments, typically from increased soil erosion, cause siltation or the smothering of



streambeds. This siltation affects fisheries, swimming, domestic water supply, irrigation, and other uses of streams.

### **Acid mine drainage (AMD)**

is a potentially severe pollution hazard that can contaminate surrounding soil, groundwater, and surface water. The formation of acid mine drainage is a function of the geology, hydrology, and mining technology employed at a mine site. The primary sources for acid generation are sulfide minerals, such as pyrite (iron sulfide), which decompose in air and water. Many of these sulfide minerals originate from waste rock removed from the mine or from tailings. If water infiltrates pyrite-laden rock in the presence of air, it can become acidified, often at a pH level of two or three. This increased acidity in the water can destroy living organisms, and corrode culverts, piers, boat hulls, pumps, and other metal equipment in contact with the acid waters and render the water unacceptable for drinking or recreational use.

### **Positive Impact of Mining:**

#### **Importance of the project to the region and country:**

- Mining is one of the major industries which play a crucial role in the process of country's economic development. Mineral wealth of Rajasthan provides the employment opportunities to the people of the state as well as region. Most of the people in the region are directly or indirectly dependent on mining and allied activities. Due to the globalization and new ventures, the requirement for Mineral has been on the rise over the last few years. Mining industry play an important role in economic sector in India. The region, where the project is situated is mostly dependant on agriculture and mineral resources. The development of mining in the area provides direct and indirect employment opportunities, infrastructure development, communication and socioeconomic infrastructure. The important benefits accruing from the project can thus be stated as-boost to local and regional economy, direct contribution to the state exchequer.

The project gains further importance to the state/ country on account of factors mentioned below

#### **Economic Benefits**

The project is expected to encourage industrial growth in the area/ region with proper utilization of local geological resources i.e. Masonry Stone.

The project will further help by increased revenue to the State Government by way of royalty and taxes etc.

#### **Employment Opportunities**

The employment to the local people of nearby villages for mine project directly will certainly increase per capita income of inhabitants of nearby localities.

**Improved Educational Facilities.** The project will help in better educational facilities in nearby area by providing financial assistance.

- **Infrastructure Development**The proposed project will facilitates clean drinking water facilities in nearby area. Maintenance of roads will be time to time.

- **Medical Assistance**Medical awareness campaign programmers will be organized time to time.The medical checkup camps will be organized in systematic manner for mine workers and nearby inhabitants.Improvement in Physico-social InfrastructureThe proposed project of mining provide better living standards in nearby area with basic social amenities such as educational facilities, health care, road infrastructure and clean drinking water.**Other Activities**The proposed

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project contribute in various cultural activities in surroundings i.e. organization of religious functions, construction and repair of religious places, local fairs and social activities etc.

**CHAPTER-2**  
**Evolution of EIA in the World**

**Evolution of EIA in the world**

EIA is one of the successful policy innovations of the 20th Century for environmental conservation. Thirty-seven years ago, there was no EIA but today, it is a formal process in many countries and is currently practiced in more than 100 countries. EIA as a mandatory regulatory procedure originated in the early 1970s, with the implementation of the National Environment Policy Act (NEPA) 1969 in the US. A large part of the initial development took place in a few high-income countries, like Canada, Australia, and New Zealand (1973-74). However, there were some developing countries as well, which introduced EIA relatively early - Columbia (1974), Philippines (1978).

The EIA process really took off after the mid-1980s. In 1989, the World Bank adopted EIA for major development projects, in which a borrower country had to undertake an EIA under the Bank's supervision (see table 1: Evaluation and history of EIA).

<p><b>Pre -1970</b></p>	<p>Project review based on thtechnical/engineering and economic analysis. Limited consideration given to environmental consequences</p>
<p><b>Early mid-1970s</b></p>	<p>EIA introduced by NEPA in 1970 in US. Basic principle: Guidelines, procedures including public participation requirement instituted. Standard methodologies for impact analysis developed (e.g. matrix, checklist and network). Canada, Australia and New Zealand became the first countries to follow NEPA in 1973-1974. Unlike Australia, which legislated EIA, Canada and New Zealand established administrative procedures.</p>



	Major public inquires help shape the process's development.
<b>Late 1970 and early 1980s</b>	<p>More formalised guidance.</p> <p>Other industrial and developing countries introduced formal EIA requirements (France, 1976; Philippines, 1977), began to use the process informally or experimentally (Netherlands, 1978) or adopted elements, such as impact statements or reports, as part of development applications for planning permission (German states [lander], Ireland). Use of EA by developing countries (Brazil, Philippines, China, Indonesia)</p> <p>Strategic Environment Assessment (SEA), risk analysis included in EA processes.</p> <p>Greater emphasis on ecological modelling, prediction and evaluation methods.</p> <p>Provision for public involvement.</p> <p>Coordination of EA with land use planning processes</p>
<b>Mid 1980s To end of Decade</b>	.In Europe, EC Directive on EIA establishes basic principle and

	<p>procedural requirements for all member states.  Increasing efforts to address cumulative effects.  World Bank and other leading international aid agencies establish EA requirements.  Spread of EIA process in Asia</p>
1990s	<p>Requirement to consider trans-boundary effects under Espoo convention.  Increased use of GIS and other information technologies.  Sustainability principal and global issues receive increased attention.  India also adopted the EIA formally.  Formulation of EA legislation by many developing countries.  Rapid growth in EA training</p>

Source: International Study of the Effectiveness of Environmental Assessment, final report. Environmental assessment in a changing world, Prepared by Barry Sadler, June 1996.

## **CHAPTER-3**

### **History of EIA in India**

#### **3.0 History of EIA in India**

The Indian experience with Environmental Impact Assessment began over 20 years back. It started in 1976-77 when the Planning Commission asked the Department of Science and Technology to examine the river-valley projects from an environmental angle. This was subsequently extended to cover those projects, which required the approval of the Public Investment Board. Till 1994, environmental clearance from the Central Government was an administrative decision and lacked legislative support.

On 27 January 1994, the Union Ministry of Environment and Forests (MoEF), Government of India, under the Environmental (Protection) Act 1986, promulgated an EIA notification making Environmental Clearance (EC) mandatory for expansion or modernisation of any activity or for setting up new projects listed in Schedule 1 of the notification. Since then there have been 12 amendments made in the EIA notification of 1994.

The MoEF recently notified new EIA legislation in September 2006. The notification makes it mandatory for various projects such as mining, thermal power plants, river valley, infrastructure (road, highway, ports, harbours and airports) and industries including very small electroplating or foundry units to get environment clearance. However, unlike the EIA Notification of 1994, the new legislation has put the onus of clearing projects on the state government depending on the size / capacity of the project.

Certain activities permissible under the Coastal Regulation Zone Act, 1991 also require similar clearance. Additionally, donor agencies operating in India like the World Bank and the ADB have a different set of requirements for giving environmental clearance to projects that are funded by them.

#### **3.1 Which Project of Mining require Environmental Clearance & from which Authority ?**

Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation.

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP	Requirement of Public Hearing	Requirement of EC	Who can prepare EIA/ EMP	Who will apply for EC	Authority to appraise/ grant EC	Authority to monitor EC compliance
<b>EC Proposal of Sand Mining and other Minor Mineral Mining on the basis of individual mine lease</b>								
0 – 5ha	'B2'	Form –IM, PFR and Approved Mine Plan	No	Yes	Project Proponent	Project Proponent	DEAC/ DEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency
> 5 ha and < 25 ha	'B2'	Form –I, PFR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	nominated by MoEFCC
≥ 25ha and < 50ha	'B1'	Yes	Yes	Yes	Project Proponent	Project Proponent	SEAC/ SEIAA	
≥ 50 ha	'A'	Yes	Yes	Yes	Project Proponent	Project Proponent	EAC/ MoEFCC	
<b>EC Proposal of Sand Mining and other Minor Mineral Mining in cluster situation</b>								
Cluster area of mine leases up to 5 ha	'B2'	Form –IM, PFR and Approved Mine Plan	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha	'B2'	Form –I, PFR and Approved Mine Plan and one EMP for all leases in the Cluster	No	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	DEAC/ DEIAA/	
Cluster of mine leases of area ≥ 25 hectares with individual lease size < 50ha	'B1'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	SEAC/ SEIAA	
Cluster of any size with any of the individual lease ≥ 50ha	'A'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/ MoEFCC	



## CHAPTER-4

### Review of literature

A comprehensive review of literature is important for any research work because it forms the foundation upon which all future work is built. There will also be chances of duplicity as the same work might have already been done by someone else. Thus primary objectives of reviewing literature are to imbibe understanding of previous work that has been done on the subject to chalk out research endeavor with a focus on the hitherto unexplored aspect of the problem. In this way review of literature helps us to distinguish between what has been done and what needs to be

- Data mining: a database perspective,
  - M. S. Sousa, M. L. Q. Mattoso & N. F. F. Ebecken COPPE, Federal University of Rio de Janeiro, P.O. Box 68511, Rio de Janeiro, RJ, Brazil, 21945-970, Email: mauros, marta @cos.ufrj.br, & nelson@ntt.ufri.br
  - Data mining on large databases has been a major concern in research community, due to the difficulty of analyzing huge volumes of data using only traditional OLAP tools. This sort of process implies a lot of computational power, memory and disk I/O, which can only be provided by parallel computers. We present a discussion of how database technology can be integrated to data mining techniques. Finally, we also point out several advantages of addressing data consuming activities through a tight integration of a parallel database server and data mining techniques.
  - Central China Normal University, Hubei 430079, China, 2GuiZhou University of Finance & Economics, Guizhou 550004, China jiangheling1@126.com
  - A plethora of big data applications are emerging and being researched in the computer science community which require online classification and pattern recognition of huge data pools collected from sensor networks, image and video systems, online forum platforms, medical agencies etc. However, as an NP hard issue data mining techniques are facing with lots of difficulties. To deal with the hardship, we conduct research on the novel algorithm for data mining and knowledge discovery through network entropy. We firstly introduce necessary data analysis techniques such as support vector machine, neural network and decision tree methods. Later, we analyze the organizational structure of network graphical pattern with the knowledge of machine learning methodology and graph theory. Eventually, our modified method is finalized with decision and validation implementation. The simulation results of our approach on different databases show the feasibility and effectiveness of our proposed framework. As the final part, we provide our conclusion and prospect.
  - International Journal of Database Management Systems (UDMS) Vol.5, No.3, June 2013 DOI: 10.5121/iidms.2013.5304 53
  - A SURVEY ON EDUCATIONAL DATA MINING AND RESEARCH TRENDS Rajni Jindal and Malaya Dutta Borah, Department of Computer Engineering, Delhi Technological University, N.Delhi, India rajnijindal@dce.ac.in malayadutta@dce.ac.in
- Educational Data Mining (EDM) is an emerging field exploring data in educational context by applying different Data Mining (DM) techniques/tools. It provides intrinsic knowledge of teaching and learning process for effective education planning. In this survey work focuses on components, research trends (1998 to 2012) of EDM highlighting its related Tools, Techniques and educational Outcomes. It also highlights the Challenges EDM.

- Parallel Computing Laboratory, Institute of Software Chinese Academy of Sciences, Beijing 100190, China

- Guiyang Academy of Information Technology. Guiyang 550000, China 3School of Mechanical and Automotive Engineering, South China University of Technology.

- Guangzhou 510641, China School of Software Engineering. Tongi University. Shanghai 201804, China Department of Computer Science, Electrical and Space Engineering, Lule'a University of Technology, 97187 Lule'a, Sweden 6Chinese

- Academy of Civil Aviation Science and Technology, Beijing 100028, China  
Correspondence should be addressed to JiafuWan; jiafuwan 76@163.com Received 17 January 2015; Accepted 1 March 2015 Academic Editor: HoubingSong

- International Journal of Computer Graphics & Animation (UCGA) Vol.5, No. 1. January 2015 DOI: 10.5121/ijega. 2015. 5105, Dr. S. Vijayanil and Ms. A. Sakila 2 Assistant Professor, Department of Computer Science, Bharathiar University, Coimbatore. 2M. Phil Research Scholar, Department of Computer Science, Bharathiar University, Combatore.

- Multimedia data mining is a popular research domain which helps to extract interesting knowledge from multimedia data sets such as audio, video, images, graphics, speech, text and combination of several types of data sets. Normally, multimedia data are categorized into unstructured and semi-structured data. These data are stored in multimedia databases and multimedia mining is used to find useful information from large multimedia database system by using various multimedia techniques and powerful tools. This paper provides the basic concepts of multimedia mining and its essential characteristics. Multimedia mining architectures for structured and unstructured data, research issues in multimedia mining, data mining models used for multimedia mining and applications are also discussed in this paper. It helps the researchers to get the knowledge about how to do their research in the field of multimedia mining.

- International Journal of Information Sciences and Techniques (IJIST) Vol.6, No. 1/2, March 2016 DOI: 10.5121/ijist.2016.6206 53 SURVEY OF DATA MINING TECHNIQUES USED IN HEALTHCARE

- DOMAIN

- Sheenal Patel and fardik Patel Department of Computer Science and Applications, Charotar University of Science & Technology, Changa, Gujarat, India

- Health care industry produces enormous quantity of data that clutches complex information relating to patients and their medical conditions. Data mining is gaining popularity in different research arenas due to its infinite applications and methodologies to mine the information in correct manner. Data mining techniques have the capabilities to discover hidden patterns or relationships among the objects in the medical data. In last decade, there has been increase in usage of data mining techniques on medical data for determining useful trends or patterns that are used in analysis and decision making. Data mining has an infinite potential to utilize healthcare data more efficiently and effectually to predict different kind of disease. This paper features various Data Mining techniques such as classification, clustering, association and also highlights related work to analyse and predict human disease.

- A Paper Produced for the EBRD, Professor R.M. Auty Lancaster University Lancaster LA1 4YB UK 044-1524-593751, 044-1524-847099, r.auty@lancaster.ac.uk

- The capital-intensive production function of mining tends to limit backward, forward and final demand linkages. Moreover, the impact of the capital intensity constraint on backward linkage is reinforced by the existence of localization economies for input supplies. These constraints on linkage are stronger the remoter the mine location, the earlier the stage in the mining cycle and the lower the PCGDP of the host economy.

- International Journal of Advanced Research in Computer and Communication

- Engineering Vol. 5, Issue 3, March 2016 Copyright to IJARCCCE DOI 10.17148/IARCCCE.2016.53179 741

- P. Haripriyal, R. Porkodi 2 Research Scholar, Department of Computer science, Bharathiar University, Combatore, India | Assistant Professor, Department of Computer science, Bharathiar University, Coimbatore, India 2

- DICOM images are complex objects, due to the nature of storing clinical data and patient images in a single file. The data sector stores roughly around 2000 tags which comprises of clinical, technical, etc. The Image sector stores multiple images as slices for a particular study. The data and images bind into a single file. It's essential to bind data and image to identify patient records. This makes DICOM images a complex object to store, retrieve and process. Thus we need multiple advanced technologies to solve complex problems in DICOM. By applying multiple Data mining Techniques, information retrieval complexity in DICOM meta data is simplified. Distributed storage is essential for quality data mining. This paper investigates mainly on the data mining techniques used in DICOM(Medical Imaging) which are stored in distributed storage. Data mining on DICOM enables quick retrieval.

- International Journal of Advanced Research in Computer Engineering &

- Technology (IJARCET) Volume 5 Issue 1, January 2016 69 ISSN: 2278 - 1323 All Rights Reserved © 2016 IJARCET

A Survey on Educational Data Mining in Field of Education Dr. P. Nithya, B. Umamaheswari, A. Umadevi Department of CS, PSG CAS, Coimbatore. Tamil Nadu.

## **CHAPTER-5**

### **EIA Process in India**

4.0 The EIA process stages in the Prior Environmental Clearance (EC) Process for New Projects: The environmental clearance process for new projects will comprise of a maximum of four stages, all of which may not apply to particular cases as set forth below in this notification. These four stages in sequential order are:•

**Stage (1) Screening (Only for Category 'B' projects and activities) •**

**Stage (2) Scoping •**

**Stage (3) Public Consultation •**

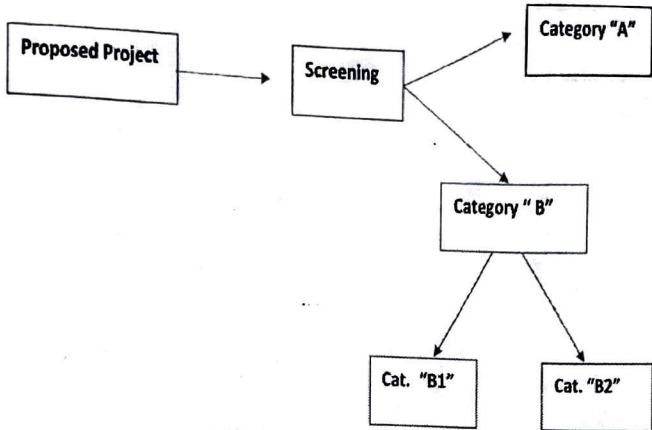
**Stage (4) Appraisal**

#### **Stage (1) -Screening:**

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending up on the nature and location specificity of the project . The projects requiring an Environmental Impact Assessment report shall be termed Category 'B 1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report. For categorization of projects into B1 or B2 except item 8 (b ), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

#### **Screening Process of Project**

After screening of Project or activities proponent/Consultant apply application to DEIAA (District Level Environmental Impact Assessment Authority) for directly Environmental Clearance for B2 project in the form IM application format.



**Format of Form 1M application**

**APPLICATION FOR MINING OF MINOR MINERALS UNDER CATEGORY B2 FOR LESS THAN AND EQUAL TO FIVE HECTARE**

**Basic Information**

Name of the Mining Lease site:  
 Location / site (GPS Coordinates):  
 Size of the Mining Lease (Hectare):  
 Capacity of Mining Lease (TPA):  
 Period of Mining Lease:  
 Expected cost of the Project:  
 Contact Information

**Environmental Sensitivity**

Areas	Distance in Kilometres/details
1. Distance of project site from nearest rail or road bridge over the concerned River.  Rivalet. Nallah ele.	
2. Distance from infrastructural facilities  Railway line  National highway  State Highway  Major District Road  Any Other Road  Electric transmission line pole, or tower  Canal or check dam or reservoirs or lake or ponds  In-take for drinking water pump house  Intake for Irrigation canal pumps	
3. Areas protected under international conventions. national or local legislation for their ecological. landscape, cultural or other related value	
4.Areas which are important or sensitive for ecological reasons • Wetlands. watercourses or other water bodies, coastal zone. biospheres, mountains, forests	

5. Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	
6. Inland, coastal, marine or underground waters	
7. State, National boundaries	
8. Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	
9. Defence installations	
10. Densely populated or built-up area, distance from nearest human habitation	
11. Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	
12. Areas containing important, high quality or scarce resources (ground water resources, surface water resources, forestry, agriculture, fisheries, tourism, minerals)	
13. Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	
14. Areas susceptible to natural hazards which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	
15. Is proposed mining site located over or near fissure / fracture for ground water recharge	
16. Whether the proposal involves approval or clearance under the following Regulations or Acts, namely:-  (a) The Forest (Conservation) Act, 1980  (b) The Wildlife (Protection) Act, 1972:  (c) The Coastal Regulation Zone Notification, 2011.  If yes, details of the same and their status to be given.	

17. Forest land involved (hectares)	
18. Whether there is any litigation pending against the project and/or land in which the project is propose to be set up?  1. Name of the Court 2. Case No. 3. Orders or directions of the Court, if any, and its relevance with the proposed project.	

After application to DEIAA project/activities Appraised by DEAC (District Environmental Appraisal Committee) Category -"B", Project proponent/Consultant apply application to SEIAA (State Level Environmental Impact Assessment Authority) and for Category-"A" project to MoEF&CC for Environmental Clearance. The proposed project is appraised by SEAC (State Environmental Appraisal Committee) for "B" and EAC (Environmental Appraisal Committee) for "A" category respectively. During my dissertation I have applied many application for Environmental clearance for "B2" and "B1" category project. One of my best project is for Mining lease for mineral Masonry Stone located near Village-salempur , Tehsil-sapotra , District-karuli (R;ijasthan). The mining lease has been sanctioned in favor of sanjay bhardwaj s/o shri indu shekar sharma for mineral Masonry Stone over an area of 1.00 hectares for the period of 20 year vide order no. AME/Sma/ML-3(98) 1311 dated 9 September 2019 by the department of Mines & Geology, Rajasthan.

**Stage (2) -Scoping:**

"Scoping": refers to the process by which the Expert Appraisal Committee in the case of Category 'A' projects or activities, and State level Expert Appraisal Committee in the case of Category 'B' projects or activities, including expansion and/or modernization and/or change in product mix of applications or activities determine detailed and comprehensive Terms Of Reference (TOR) addressing all relevant environmental concerns for the Environment Impact Assessment (EIA) Report in respect of the project or activity for which prior environmental clearance is sought. The Expert Appraisal Committee or State level Expert Appraisal Committee concerned shall determine the Terms of Reference on the basis of the information furnished in the prescribed application Form/ Form IA including Terms of Reference proposed by the applicant, a site visit by a sub-group of Expert Appraisal Committee or State level Expert Appraisal Committee concerned only if considered necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, Terms of Reference suggested by the applicant if furnished and other information that may be available with the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. All projects and activities listed as Category 'B' in Item 8 of the Schedule (Construction/Township/Commercial Complexes /Housing) shall not require Scoping and will be appraised on the basis of Form 1/ Form IA and the conceptual plan.

(ii) The Terms of Reference (TOR) shall be conveyed to the applicant by the Expert Appraisal Committee or State Level Expert Appraisal Committee as concerned within sixty days of the receipt of Form 1. In the case of Category A Hydroelectric projects Item 1(c) (i) of the Schedule the Terms of Reference shall be conveyed along with the clearance for pre-construction activities .If the Terms of



Reference are not finalized and conveyed to the applicant within sixty days of the receipt of Form 1, the Terms of Reference suggested by the applicant shall be deemed as the final Terms of Reference approved for the EIA studies. The approved Terms of Reference shall be displayed on the website of the Ministry of Environment and Forests and the concerned State Level Environment Impact Assessment Authority.

(iii) Applications for prior environmental clearance may be rejected by the regulatory authority concerned on the recommendation of the EAC or SEAC. In case of such rejection, the decision together with reasons therefor shall be communicated to the applicant in writing within sixty days of the receipt of the application.

### **View of ToR (Terms of Reference) Stage (3) -Public Consultation:**

(i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity . . . are ascertained with a view to taking into account all the material concerns in the project. All projects or activities shall undergo Public Consultation, except the following:

- modernization of irrigation projects (item I(c) (ii) of the Schedule).
- (b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities and which are not disallowed in such approvals.
- (c) expansion of Roads and Highways (item 7 (t) of the Schedule) which do not involve any further acquisition of land.
- (d) all Building /Construction projects/Area Development projects and Townships (item 8).
- (e) all Category 'B2' projects and activities.
- (f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.

(ii) The Public Consultation shall ordinarily have two components comprising of: (a) a public hearing at the site or in its close proximity-district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons.

- obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity.
- (iii) the public hearing at, or in close proximity to, the site(s) in all cases shall be conducted by the State Pollution Control Board (SPCB) or the Union territory Pollution Control Committee (UTPCC) concerned in the specified manner and forward the proceedings to the regulatory authority concerned within 45 (forty five) days of a request to the effect from the applicant.

(iv) in case the State Pollution Control Board or the Union territory Pollution Control Committee concerned does not undertake and complete the public hearing within the specified period, and/or does not convey the proceedings of the public hearing within the prescribed period directly to the regulatory authority concerned as above, the regulatory authority shall engage another public