



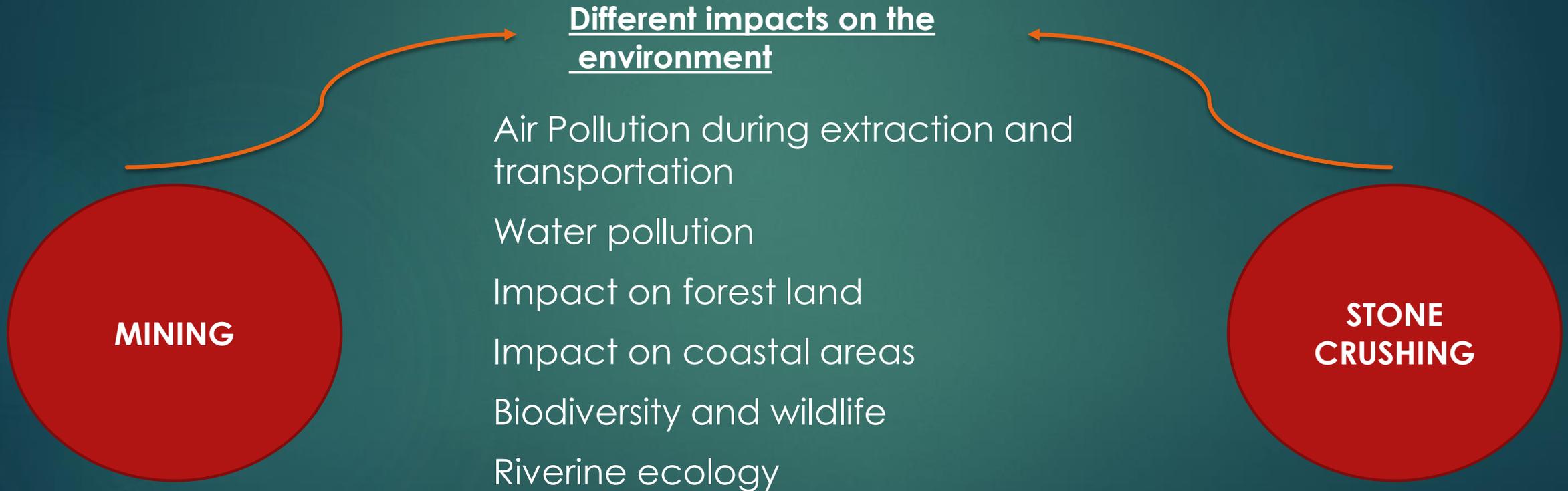
Legislative and Governance Framework – An Insight into the compliances of Extractive Industries

ADV. MANSI BACHANI
ADV. GITANJALI SANYAL
ENVIRO LEGAL DEFENCE FIRM

SCOPE OF AUDITING IN ENVIRONMENTAL ISSUES

- ▶ Whether different sources of pollution are duly accounted for? Even for a particular source of pollution such as air pollution, there are ancillary activities .
- ▶ Compliance- with national environmental laws and regulations by government departments, municipalities, and/or other bodies, provisions of penalty (whether it accounts for the pollution caused by the industry) ;
- ▶ Performance-The feasibility of the projects established by various project proponents, technology adopted for mitigation of environmental and health hazards

Whether different sources of pollution, impacts on the environment are duly accounted for in an extractive industrial process?



National Mining Policy 1993

National Mining Policy 2008

National Mining Policy 2019

Mica Mines Labour Welfare Fund Act, 1946

Coal Mines Provident Fund and Miscellaneous Provisions Act, 1948

Coal Mines Pension Scheme, 1998 (suppression to 1971 Scheme)

Mines Act 1952

Mines Rules 1955

Payment of Wages (Mines) Rules, 1956

Maternity Benefit (Mines and Circus) Rules, 1963

Limestone and Dolomite Mines Labour Welfare Fund Act 1972 and Rules 1972

Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Cess Act 1976 and Rules of 1978

Iron Ore Mines, Manganese Ore Mines and Chrome Ore Mines Labour Welfare Fund Act 1976 and Rules of 1978

Mines and Minerals (Development and Regulation) Act, 1957

Coal Bearing Areas (Acquisition and Development) Act, 1957

Mineral Concession Rules, 1960

Granite Conservation and Development Rules, 1999

Marble Development and Conservation Rules, 2002

Minerals (Evidence of Mineral Contents) Rules, 2015

Mineral (Auction) Rules, 2015

National Mineral Exploration Trust, 2015

Mines & Minerals (Contribution to District Mineral Foundation) Rules, 2015

Mineral (Mining by Government Company Rules), 2015

Minerals (Other the Atomic and Hydro Carbons energy Minerals) Concession Rules, 2016

Atomic Minerals Concession Rules, 2016

Mineral Conservation and Development Rules, 2017

Mines and Minerals (Development and Regulation) Removal of Difficulty Order, 2017

Mining – Legal and Policy

Compliance Regime

(At a Glance!)

MINISTRY OF MINES**NOTIFICATION**

New Delhi, the 10th February, 2015

S.O. 423(E).—In exercise of the powers conferred by clause (e) of section 3 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957), the Central Government hereby declares the following minerals to be minor minerals in addition to the minerals already declared by notification as minor minerals hereinbefore under the said clause:

- (i) Agate;
- (ii) Ball Clay;
- (iii) Barytes;
- (iv) Calcareous Sand;
- (v) Calcite;
- (vi) Chalk;
- (vii) China Clay;
- (viii) Clay (Others);
- (ix) Corundum;
- (x) Diaspore;
- (xi) Dolomite;
- (xii) Dunite or pyroxenite;
- (xiii) Felsite;

- (xiv) Felspar;
- (xv) Fireclay;
- (xvi) Fuschite Quartzite;
- (xvii) Gypsum;
- (xviii) Jasper;
- (xix) Kaolin;
- (xx) Laterite;
- (xxi) Limekankar;
- (xxii) Mica;
- (xxiii) Ochre;
- (xxiv) Pyrophyllite;
- (xxv) Quartz;
- (xxvi) Quartzite;
- (xxvii) Sand (Others);
- (xxviii) Shale;
- (xxix) Silica Sand;
- (xxx) Slate; and
- (xxxi) Steatite or Talc or Soapstone.

[F. No. 5/1/2015-M. VI]

R. SRIDHARAN, Addl. Secy.

MINOR MINERALS SPECIFICALLY NOTIFIED BY THE CENTRAL GOVERNMENT

Kinds of Impact and pollution sources at different stages of the mining activities – laws/regulations to counter the impact

I. Compliances to counter different sources of pollution prior to commencement of mining

- Mining lease – u/ Mines and Mineral Development and Regulation
- Consent to Establish and Operate under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974
- Standards fixed as per the Environment Protection Act, 1986 and Environment Protection Rules 1986 – among other Rules and Regulations



GUJARAT POLLUTION CONTROL BOARD

PARYAVARAN BHAVAN
Sector-10-A, Gandhinagar 382010
Phone : (079) 23222425
(079) 23222152
Fax : (079) 23232156
Website : www.gpcb.gov.in

Application For CTE After TOR

File No : GPCB/ (PCB ID. - 80989)

CTE-45499

To,

aliya

Mines, Z/P, Khorasa, tal-Maliya Hauna, dist-Junagadh,
City : Khorasa ,
Dist : Junagadh ,
Taluka : Maliya

Sub: **Consent to Establish (After obtaining Terms Of Rference For Environment Clearance) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981.**

Ref: (1) Your online application No. 190194 dated 04/02/2021

(2) TOR issued by State Authority vide their letter no. SEIAA/GUJ/TOR/1(a)/1490/2020 Dated 04/12/2020

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants **Consent to Establish (After obtaining Terms Of Rference For Environment Clearance) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981** for manufacturing of products as mentioned into the application of Environment Clearance (EC) for which TOR is granted vide letter under reference no (2) above.

Consent To Establish Is Granted Subject To The Following Conditions: -

- 1) The validity period of this CTE shall be Seven Years from the issue of this order.
- 2) Applicant shall strictly comply with all conditions stipulated by competent authority in the order of Environment Clearance to be issued in reference to TOR issued vide letter under reference No. : 2 above.
- 3) The applicant shall however , not without the prior concern of the Board. Bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the water Act - 1974, the Air - 1981 and the Environment (Protection) Act - 1986.



For and on behalf of
Gujarat Pollution Control Board

M. R. Macwana
ROH - Junagadh

Environment Clearance – concept introduced in 1994 under the ambit of the Environment Protection Act, 1986

EIA Notification 2006 replaced the 1994 Notification - Stages – Screening (assessing requirement of prep. of EIA), Scoping, Public Consultation, Appraisal



(See paragraph 2 and 7)
LIST OF PROJECTS OR ACTIVITIES REQUIRING PRIOR ENVIRONMENTAL CLEARANCE

Project or Activity	Category with threshold limit		Conditions if any	
	A	B		
1	Mining, extraction of natural resources and power generation (for a specified production capacity)			
(1)	(2)	(3)	(4)	(5)
[1(a)]	(i) Mining of minerals	[> 250 ha mining lease area in respect of major mineral mining lease other than coal] [> 500 ha] of mining lease area in respect of coal mine lease Asbestos mining irrespective of mining area.	[All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal] [≤ 500 ha] of mining lease area in respect of coal mine lease	[General Conditions shall apply except for mining of minor minerals.] Note: (1) Mineral prospecting is exempted; (2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI; [(3) The evacuation or removal and transportation of already mined out material lying within the mining leases expiring under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957), by the previous lessee, after the expiry of the said lease, shall not form the part of the mining capacity so permitted to the successful bidder, selected through auction as per the procedure provided under that Act and the rules made thereunder.]
	(ii) Slurry pipelines (coal, lignite and other ores) passing through national parks / sanctuaries / coral reefs, ecologically sensitive areas.	All projects.		



Case Discussion – Protection of Environment and Public Service Co. v. Union of India & Ors (O.A. No. 58/2018)

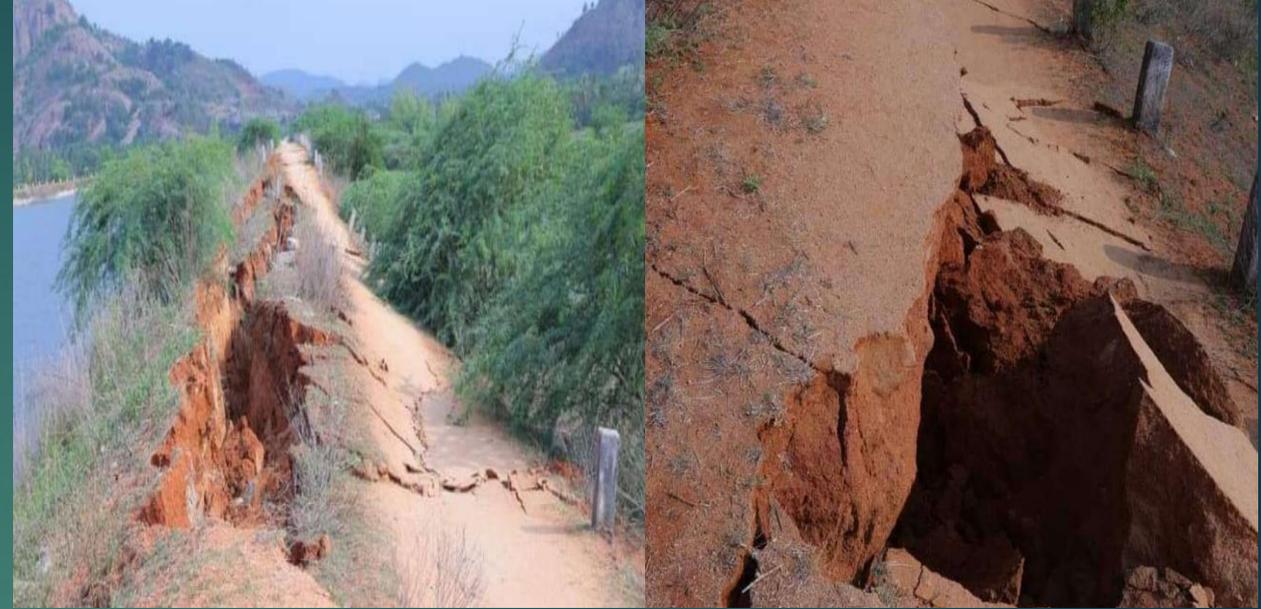
- Limestone mining case of Gujarat
- Mining Lease area was less than 5 hectares. Major Mines less than 5 ha exempted from the requirement of EC.
- Tamil Nadu Small Miners Case – NGT examined the requirement of EC for Major Mines. Cut off date of March 2016 provided for application for EC.
- Another issue – grant of consent was linked to grant of EC

EXEMPTION OF CERTAIN CASES FROM REQUIREMENT OF ENVIRONMENTAL CLEARANCE –Minor Minerals

- ▶ **Extraction of ordinary clay or sand, manually, by the Kumhars (Potter) to prepare earthen pots, lamp, toys, etc. as per their customs.**
- ▶ Extraction of ordinary clay or sand, manually, by earthen tile makers who **prepare earthen tiles.**
- ▶ Removal of sand deposits on agricultural field after flood by farmers.
- ▶ Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
- ▶ Community works like de-silting of village ponds or tanks, construction of village roads, ponds, bunds undertaken in Mahatama Gandhi National Rural Employment and Guarantee Schemes, other Government sponsored schemes, and community efforts.
- ▶ Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
- ▶ Traditional occupational work of sand by Vanjara and Oads in Gujarat
- ▶ Digging of well for irrigation or drinking water.
- ▶ Digging of foundation for buildings not requiring prior environmental clearance.
- ▶ Excavation of ordinary earth or clay for plugging of any breach caused in canal, nala, drain, water body, etc., to deal with any disaster or flood like situation upon orders of District Collector or District Magistrate.
- ▶ Activities declared by State Government under legislations or rules as non-mining activity with concurrence of the Ministry of Environment, Forest and Climate Change, Government of India.

Mineral Concession Rules 1960 – “Rule 70. Sand not be treated as minor mineral when used for certain purposes : - Sand shall not be treated as a minor mineral when used for any of the following purposes, namely:-

- (i) purposes of refractory and manufacture of ceramic;
- (ii) metallurgical purposes;
- (iii) optical purposes;
- (iv) purposes of stowing in coal mines;
- (v) for manufacture of silvicrete cement;
- (vi) for manufacture of sodium silicate;
- (vii) for manufacture of pottery and glass.”



Case Discussion –

- 1. **Deepak Kumar Case – All mining activities requires EC, or less than 5 ha leases –**
 - Led to the enactment of Sustainable Sand Mining Guidelines and Enforcement and Monitoring Guidelines for Sand Mining
- 2. **Mandatory Requirement of District Survey**
 - **Dinesh Kumar v. Mining Officer Seoni District and Others**
 - **KR Reddy – Granite Mining – cluster approach**



► **Biodiversity Impact Assessment – Dr. Kashmira Kakati v. Coal India Limited (O.A. No. 19/2014)**

■ One of the main Issues– operation of extractive industries such as Coal Mining by CIL in Elephant Reserves and Elephant Corridors without Biodiversity Impact Assessment, recognition of elephant Reserves and Corridors, abandonment of coal mines by CIL without appropriate reclamation leading to discharge of hazardous water from old mines

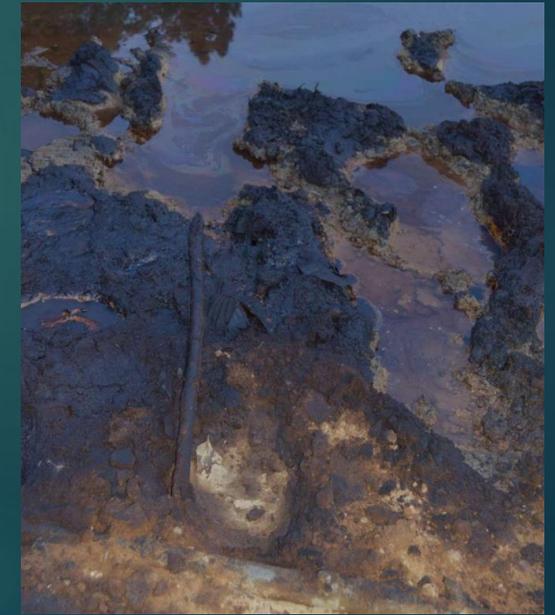
■ NGT issued 14 directions – one of them was to specially assess the impact of development as part of the EIA process and ensure assessment under Section 36 (4) of the Biological Diversity Act.

- Registration of separate case against CIL and Oil India Ltd. in matters relating to adverse effect caused due to commission and omission in oil extraction and coal extraction

- CIL to prevent the discharge of toxic yellowish orange water flowing out of old mines

- Case pending before the Hon'ble Supreme Court

- Other Issues of – Reclamation of Mines, Adherence to Mine Closure Plans also adjudicated by the Tribunal, Hazardous Waste Rules 1989, 2008, 2016 – Authorization, Annual Report, Form 3 and Form 4



Coal Mining in Jharkhand – matter sub- judice before the NGT

Case regarding alleged mining in forest area by a PSU, without Forest Clearance, Wildlife Management Plan, in a tiger corridor and in the Eco Sensitive Area of Wildlife Sanctuary, near a river and utilisation of ground water

- Tiger Corridors Notified under WLPA – Permission from NTCA required
- Hydrographic studies – for river diversions
- Approval from the Central Ground Water Authority for groundwater utilisation
- Forest Clearance under the Forest Conservation Act, 1980
 - ❑ Requirement of FC from the Central Government before De- reserving a Reserve Forest ,undertaking a non-forestry activity, assigning forest lands under lease and clearing Of trees.
 - ❑ Concept of Compensatory Afforestation - land to be nearest to the forest diverted; non-forest land preferred, if not then degraded land
 - ❑ Net Present Value – depends on different classes of Forest

Association for Protection of Democratic Rights & Anr vs State of West Bengal 2021 (5) SCALE/ SLP No. 25047/2018 –

Realistic assessment of the economic value of a tree, with reference to its value to environment and longevity, production of oxygen and carbon sequestration, soil conservation, protection of flora/fauna, habitat and ecosystem integrity and any other ecologically relevant factor, distinct from wood/ timber.

shall govern decision making w/r to cutting of trees for developmental project

Guidelines to specify species of trees, categorizing them based on environmental values such as age, girth among others

special treatment for geographical area or eco-sensitive area, including minimum threshold beyond which the Guidelines will apply,

assessment of intrinsic and institutional value, including ecosystem services

Rules regarding alternative routes/sites for roads/projects and possibility of alternative mode of transport mode of compensation financial and otherwise, process that governs computation and recovery.

To consider and suggest modifications to the existing framework for NPV

manner and mechanism of compensatory afforestation to be carried out

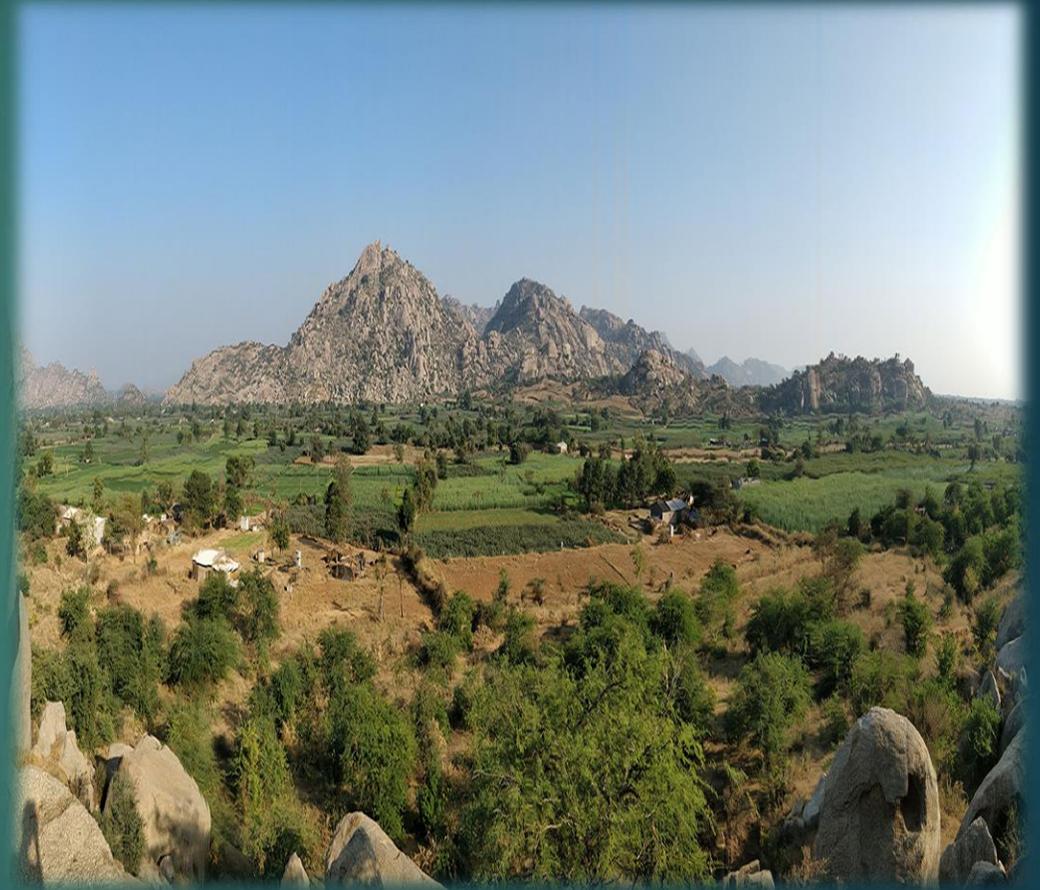
consider the need for any permanent expert body and its proposed structure

▶ Mining in Ecologically Sensitive Areas

Damage due to mining activities in Balaram-Ambaji Wildlife Sanctuary situated in the Banaskantha District of Gujarat as well as in the ecologically sensitive areas surrounding the sanctuary – Matter subjudice before the Hon'ble NGT (Western Zone).

▶ Central Government under EPA, 1986 has the power to declare Eco-Sensitive Zones (ESZs) - Evolution of the concept of ESZ through legal and policy instruments

- National Wildlife Action Plan, 2002
- Wildlife Conservation Strategy, 2002
- National Board for Wildlife Meeting on 17.3.2005
- SC in T.N. Godavarman - order dt. 04.08.2006 - 1 km safety zone
- SC in Goa Foundation (WP No. 460 of 2004) - order dt. 04.12.2006 – Radius of 10 Km as ESA
- Judgment dated 03.06.2022 - in Re: T.N. Godavarman Thirumulpad - 1 Km ESZ



► Requirement of Wildlife Clearance from the National Board of Wildlife in ESZ

NGT in *Amit Kumar Vs UoI & Ors.* - order dt. 14.08.2013 - new projects being considered for issuance of EC, if falling within a radius of 10 km from the boundary of Okhla Bird Sanctuary, + NOC from NBWL

Nityendra Manav - NGT vide order dated 20.12.2018 - final ESA notification of Sariska Tiger Reserve Sanctuary was pending issuance so all mining activities within 10 kms be stopped till mining leases are cleared by the standing committee of the NBWL



► **Mining in CRZ areas – through the lens of black sand mining in the coasts of Kerala**

• Unregulated mining of rare earth/atomic minerals in a CRZ area - impacts on natural landscape, ecology and loss to public exchequer - coastal areas of Alappuzha district have a network of backwaters, estuaries and interconnecting canals and the Thottapally Spillway region is a tidal barrier on the south side which regulates the ingress of salinity in the southern sector.

• **Requirement of CRZ Clearance under CRZ Notification, 2011; now CRZ Notification, 2019 – Only for permissible activities** – Clause 4 prohibits mining of sand, rocks and other sub strata materials

- Extraction of beach sand minerals from the rare earths group such as ilmenite, rutile, zircon, sillimanite and monazite, all of which are categorised as ‘Atomic Minerals’ under Part B of Schedule I of the MMDR Act, 1957
- MOEF OM dt. 08.11.2011 - Removal of Sand in Coastal Regulation Zone Areas of Rivers/ Estuaries by manual methods by traditional communities
- AERB’s Guidelines dt. 07.2013 on Radiological Safety in Handling Beach Sand Minerals and Other Naturally Occurring Radioactive Minerals
- Atomic energy and mineral resources necessary for its production – Union List of the Constitution – Sec. 5 of the MMDR Act, 1957 bars the State Government from granting a permit/license/lease without the prior approval of CG for atomic minerals
- Atomic Energy Act, 1962
- Atomic Energy (Working of the Mines, Minerals and Handling of Prescribed Substances) Rules, 1984
- Atomic Energy (Radiation Protection) Rules, 2004



Mining, Environment and Development- Some Other Concerns

- ▶ Six Monthly Compliance Reports under EIA Notification, 2006
- ▶ Utilisation of Environment Management Fund for the activities proposed
- ▶ Regular inspections and compliance with Consent to Operate by the State Pollution Control Board
- ▶ Samatha Case
 - Alienation of land for mining in Scheduled Areas in A.P.
 - Persuasive Value
- ▶ Mining and FRA, 2006- Negotiating Recognised and Vested Rights
- ▶ Mining in Offshore Areas - Offshore Areas Mineral (Development and Regulation) Act, 2002 - **Section 4(q)** defines “*pollution of offshore environment*” to mean the indirect/direct introduction of substances/energy into the offshore environment

Damage Assessment for illegal mining

- ▶ Common Cause case
 - ▶ Protection of Environment – compensation imposed despite finding of IIT Gandhinagar that no adverse damage has resulted from Mining
 - ▶ K. Maheshwaram – Adoption of World Bank method for computation of compensation
 - ▶ MoEF&CC in 2021 had issued a Standard Operating Procedure for grant of ex-post facto Environment Clearance.
- 1% of the project cost to be imposed as compensation for illegal mining.

Concerns in Establishment and Operation of Stone Crusher Industries – an insight into the legal compliance regime

► Anil M. Puri /Anand Singh Negi Case

Facts: Challenging establishment and operation of Stone Crusher in Uttarakhand

Verdict – Legal establishment of the Stone Crusher – obtaining the Land Conversion Certificate under UP Zamindari and Abolition Act

- Categorisation under the Noise Pollution Rules, 2000
- Whether the minimum distance from Government Reserve Forest, River Bodies is maintained
- Whether the area falls under the a Fruit Belt

SCHEDULE			
(see rule 3(1) and 4(1))			
Ambient Air Quality Standards in respect of Noise			
Area Code	Category of Area / Zone	Limits in dB(A) Leq*	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note:-

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
3. Silence zone is an area comprising not less than 100 metres around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is an energy mean of the noise level over a specified period.

CPCB Categorisation of Industries

Category	Pollution Index
Red (Most polluting)	60 and above
Orange	41-59
Green	21-40
White (Least polluting)	Up to 20

Balaji Stone Crusher Case – Sub-judice in the NGT

- Adjudicating whether Stone Crushers can be established in Doon Valley
- Categorization of stone crushers as an orange category industry
- Compliance with conditions of CTE such as establishment of 33% green belt
- Distance from Perennial and Non-Perennial River



Environmental
Auditing and
market based
mechanisms
for extractive
industries – the
road ahead

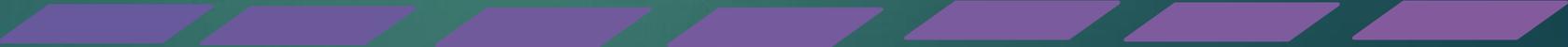
Examples of **Market Based Mechanisms** that may be adapted by extractive industries - tax relief for industries who adopt pollution control measures, evaluating the loss the industry incurs because of the implementation of weather and air pollution laws and subvention and tax concession for industries to install anti-pollution measures or recycling measures



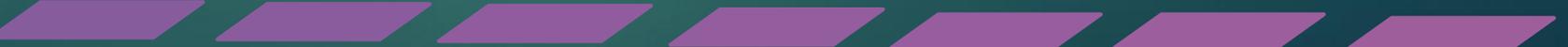
Emission Trading Scheme - a cap-and-trade programme where regulators establish a cap on the quantum of emission that all industries in an area are permitted to emit collectively over a period of time.



Pilot Project being implemented with industries in Surat for trading of Particulate Matter . Ministry of Environment, Forest & Climate Change Office Memorandums on Corporate Environment Responsibility – ETS could be part of it ?



Budget of 2023 has introduced **Green Credits** – On all activities that would encourage mitigate adverse environmental impacts



THANK YOU

 +91 8600531203

 mansi@eldfindia.com

 +91 8777385984

 gitanjali@eldfindia.com